

Public Utilities

FORTNIGHTLY



December 3, 1936

THE QUODDY FOLLY

By Henry Earle Riggs

“ ”

The Human Angle of Public Utility Service

By Raymond W. Morrison

“ ”

Back-fire at the World Power Conference

By Herbert Corey

“ ”

Effects of Auto Trailers on Utility Business

By Page Golsan, Jr.

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS



To an Executive interested in gas consumption



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Here is the Truth about SIDEWALL FAILURES IN TRUCK TIRES

Are your tire bills too high? Do nearly new tires go bad long before the tread is worn? If yours is a common experience. Every month, thousands of dollars in unused miles roll on to scrap piles. There's a reason—and a remedy. Think of the places that tear at tires. With every start, tires get a thrust—with every stop, a yank. And always—as a tire rolls—heavy loads flex the casing—several hundred times a minute. Every mile, every minute, these forces batter away at your tires.

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Department T-123

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Contributing Editor—OWEN ELY

Public Utilities Fortnightly



VOLUME XVIII

December 3, 1936

NUMBER 12

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P This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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Pages with the Editors

IT was with some eagerness, not unmingled with other feelings, that ye editors recently awaited receipt of our regular copy of our esteemed contemporary, the *Literary Digest*; for it was in that issue that the editors of the *Digest* were expected to explain, or at least discuss, the poor showing of its quadrennial presidential straw poll. After reading through a description of the manner in which the *Digest* organized its poll in years gone by, no conclusive solution was forthcoming. The *Digest* editors seem to be about as puzzled as we were. Indeed, the chief explanation of the *Digest* editors for the failure of their straw poll appeared to be a variation of the old story: "I didn't know it was loaded."

It all goes to show that in a world of change, there is no eternal verity except change itself. And now the very sweep of the New Deal victory last month has caused speculation as to the resurrection of a number of early New Deal policies and projects that had been buried with such care by the "experts" and "observers." Even the old Blue Eagle, it is rumored, may again stir from his grave under a new name and plumage, even as the fabled Phoenix arose from the ashes of its funeral pyre. And if Death takes a holiday in this manner for all the past slips of the New Deal, is it not unlikely that the romantic Passamaquoddy tidal power project will be among the disinterestments to be looked for at the next congressional session?

It is well known that President Roosevelt has never entirely surrendered his hopes for the Bay of Fundy project. Only last August, while visiting in Maine, he told the people of Eastport: "Quoddy will be completed. I believe in Quoddy and I believe you do, too!" Of course that was before Maine and Vermont seceded from the New Deal. Yet, the President's fascination for this proposal to harness the tides of the ocean has always been thought to be more idealistic than political. And now, with a blanket mandate from the people and a Congress of a kind to which he can still send "must" bills, there is good reason to believe that President Roosevelt can have his Quoddy if he still wants it.

So to balance the favorable article we published about Quoddy in our August 27th issue, we are presenting in this issue (beginning page 739), a critical discussion of the subject by DR. HENRY EARLE RIGGS, *professor emeritus* of the University of Michigan, who needs no further introduction to FORTNIGHTLY readers.

THERE have been a number of interesting and amusing by-products of that fast growing modern institution, the trailer. Hotel men have been driven to look over acreage on the outskirts of towns instead of square feet down in the busy sections. Producers of cased meats (hot dogs to you) and other edibles of the highway grill stands are chuckling as they watch the American home literally take to wheels. Then, too, the trailer has been a godsend to so-called humorists and cartoonists who have been having a difficult time lately getting laughs out of this serious world.

But if this trailer movement keeps up, what effect will it have, or could it have, on central station utility service, including gas, electricity, and the telephone? In this issue we have a very forward looking if somewhat speculative article by PAGE GOLSAN, JR., in which the author attempts to forecast what would happen to the utilities if America should become a nation of rubber-tired nomads. Some readers may think the trailer situation envisioned in this article is a little too improbable for such serious attention, but look what this Rose Bowl business has done to modern collegiate football.

MR. GOLSAN, a newcomer to the FORTNIGHTLY pages, is a cadet engineer with the New



HENRY EARLE RIGGS

Would thirty-six millions make only half a Quoddy?

(SEE PAGE 739)

Addressograph Payroll Methods Simplify Record Requirements of Social Security Act

Even before the enactment of new legislation, "making up the payroll" involved the writing of numerous records and the filling-in of many forms. It imposed a peak-load burden on the clerical staff. Speed and accuracy were essential.

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It is evident that certain reports will

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NAME - AND DATA-WRITING EQUIPMENT

York State Electric and Gas Corporation, and graduated only two years ago from Massachusetts Institute of Technology. He was born in California and now labors upstate in New York.

RAYMOND W. MORRISON, whose article on public utilities begins on page 748, is also a new contributor to the FORTNIGHTLY. Reversing the process used by MR. GOLSAN, MR. MORRISON was born in the upstate New York and now labors in California on matters of valuation and depreciation for the San Joaquin Light and Power Company. Speaking of public relations generally, MR. MORRISON concedes that humility is a virtue but he believes that a little advertisement of one's virtues is also helpful for an industry that seeks greater public confidence.



RAYMOND W. MORRISON

He wants the utility industry to blow its own horn a little more.

(SEE PAGE 748)

THE fourth article in this issue is by that contributor so familiar to FORTNIGHTLY readers, HERBERT COREY. Other writers on political events like to stay away from Washington for "perspective," as Walter Lippmann would say, or because, as a more cynical writer once said of Washington, he "couldn't see the circus for the clowns." But HERBERT COREY wants to be right on the firing line. He lives in Washington, stays here a good deal of the time, and actually seems to be getting a great deal of fun out of it.

AND so when the Third World Power Conference was recently held in the Capital City, it was not surprising that MR. COREY took great interest in it. In this issue we

have the benefit of MR. COREY's ruminations concerning the doings of that august gathering.

FORTNIGHTLY readers will be doubtlessly intrigued by the notice which accompanies this issue to the effect that there will be no FORTNIGHTLY published for December 31st, as might otherwise be expected. The reasons for the hiatus between our next issue—December 17th—and January 7th are more calendrical than editorial. It's a little trick the calendar plays on FORTNIGHTLY publications about every eleven or twelve years. It last happened in 1925 and before that in 1914, because the FORTNIGHTLY always publishes on a Thursday. With a different publication day in the week, the years would be different but the same gap would occur sooner or later.

IN short, PUBLIC UTILITIES FORTNIGHTLY is published every other Thursday, which would make twenty-six issues in the ordinary year of fifty-two weeks. But this year of 1936 happened to have twenty-seven alternate Thursdays for our publication date. However, the same thing won't happen again until 1948.

THE next issue of this magazine will be out December 17th.



PAGE GOLSAN, JR.

What would the utilities do if their residential customers drove off and left them?

(SEE PAGE 761)

The Editors

HOW LEADING UTILITIES KEEP INVENTORY DOWN

*even while sales
are going UP!*



WITH load rapidly on the increase, every utility is faced with the problem of keeping inventory from increasing at the same pace.

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PREPRINTS FROM PUBLIC UTILITIES REPORTS

*Various regulatory rulings by courts and commissions reported in full text,
pages 353-412, from 15 P.U.R.(N.S.)*

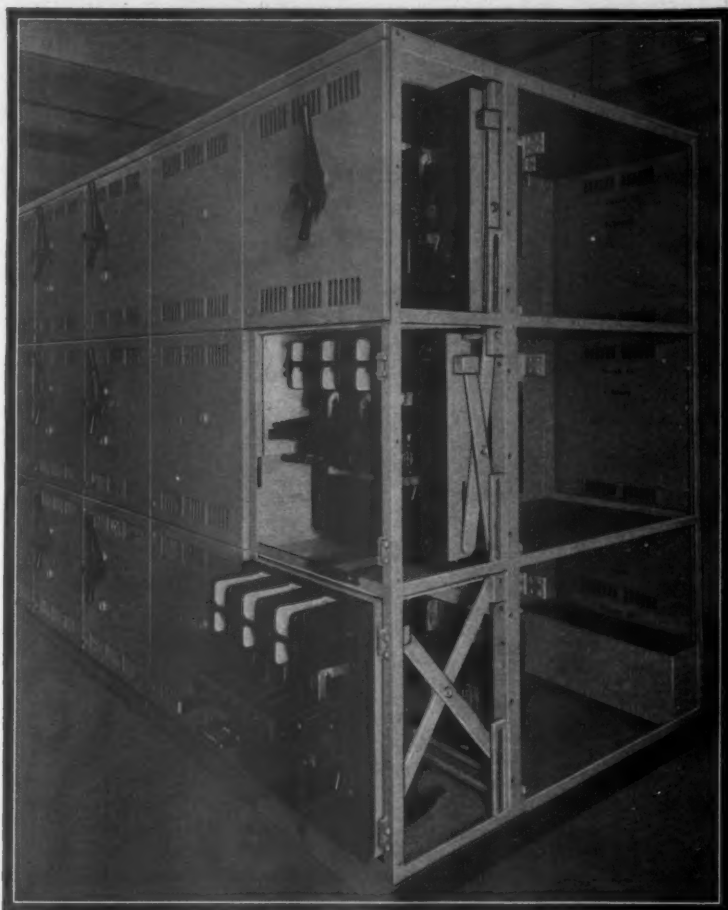
A NEW SWITCHBOARD FOR CENTRAL STATION SERVICE

and two hinged doors removed to allow pantograph mounting of circuit breakers.

—OPERATING POSITION.

—TEST POSITION.

—POSITION WHEN COMPLETELY CONNECTED.



SAFE PROGRESS in SWITCHBOARDS



Offices in Principal Cities.

Pantograph mounting for circuit breakers is typical of the way I-T-E improves switchboard construction. *Gain in flexibility and other operating advantages is matched by an advance in safety.*

Details of I-T-E withdrawal type construction, as used in many recent central station switchboards, are available in Bulletin 368. The bulletin includes all features of I-T-E steel-enclosed switchboard design.

I-T-E CIRCUIT BREAKER CO., PHILADELPHIA, PA.

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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

EDWARD STOKES

Former Governor of New Jersey.

"Utility and railroad managements are the most misrepresented and abused group in public life except the bankers."

HARCOURT A. MORGAN
*Director, Tennessee Valley
Authority.*

"In a country where nearly six million farm homes are without electricity there has been no rural electrification experience."

ERNIE PYLE
Columnist.

"Talk about government ownership . . . one third of the state of Idaho is owned by the government, in national forests."

DR. HAROLD G. MOULTON
*President, Brookings
Institution.*

"Economic progress in the years that lie ahead is dependent in a very important way upon development in the transportation field."

C. E. GROESBECK
*President, Electric Bond &
Share Company.*

"No business or industry can survive the combination of both regulation and competition at the hands of the Federal government."

FLOYD L. CARLISLE
*Chairman of the Board,
Consolidated Edison Company
of New York.*

"There is no power problem, certainly in the United States of America, that cannot be solved by fair negotiations and reasonable compromise."

OLIVER L. LAWRENCE
*Member of British Royal Institute
of International Affairs.*

"In Britain the principle of government interference, in the social interest, with the freedom of private enterprise in industry, is now nearly a century old."

ROY EMERSON CURTIS
*Dean, School of Business and
Public Administration,
University of Missouri.*

"With the Federal government now in the field of electric light and power regulation, public control is likely to become as thorough here as it is in the railway field."

LISTER HILL
*United States Representative
from Alabama.*

"The proposed development of the Coosa-Alabama river system for navigation, power, and flood control would come nearer paying for itself than any river project the government has undertaken."

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SHORT-CUT KEYBOARD



Only on a keyboard of
this type can you do
**SHORT-CUT
FIGURING**

1	0.0	0	
5	3	6	
1	0.4	5	
2	5	6.0	0
6, 7	1	2.7	0

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1000 On the Short-Cut Keyboard there is no cipher key. Ciphers always print automatically. The amount 10.00 was written by depressing the "1" and the motor bar—both in one operation!

536 On the Short-Cut Keyboard two or more keys can be depressed at one time. Thus, 5.36 was written by depressing the "5", the "3", the "6", and the motor bar—all in one operation!

1045 Four digit amounts are easily written the short-cut way. The "1", the "4", the "5", and the motor bar are depressed—all in one operation!

2560 The Short-Cut Keyboard saves operations in writing larger amounts too. The "2", the "5", the "6", and the motor bar are depressed—all in one operation!

63270 Many operations can be saved in listing large amounts on the Short-Cut Keyboard. In this instance, the "6", the "7", and the "1" were depressed in the first operation; the "2", the "7", and the motor bar in the second operation. Thus, this large amount requires only two operations!

REMARKABLE REMARKS (Continued)

MAURY MAVERICK
Magazine writer.

"Let the TVA and similar enterprises tell the world that they stand: (1) for government ownership, and (2) for directing any pool in which the government might have any interest whatever."

SAMUEL B. PETTENGILL
U. S. Representative from Indiana.

"In terms of social ethics, where does the dollar derive a claim to being paid dividends during periods of depression superior to the claims of the laid-off worker to being paid unemployment reserves?"

THOMAS F. WOODLOCK
*Former Interstate Commerce
Commissioner.*

"Now that transportation has become an acutely competitive industry, it is time to cease regulating railroads as a monopoly and free them sufficiently to enable them to meet their competitors on reasonably equal terms."

ALEXANDER DOW
*President, Detroit Edison
Company.*

"I haven't even the satisfaction of knowing that tax money is spent reasonably and for good purpose. We already pay 14 cents of every gross revenue dollar for taxes. If they put a tax on surpluses it will play the very devil."

ANNING S. PRALL
*Chairman, Federal
Communications Commission.*

"In America we believe in private enterprise whenever it can do the job in the public interest. We regard the radio as the rightful heritage of the people, best performed through private operation under careful government surveillance."

WILLIAM L. RANSOM
*Former President, American
Bar Association.*

"The public ought to consider very carefully whether it wishes the policies of the government to be such as to make a continuance of private ownership of this industry impossible and thereby to compel the socialization of the railroads."

THOMAS W. LAMONT
Partner, J. P. Morgan & Co.

"Government ownership might result logically in elimination of competition among the railways. But still, with competitive highways, waterways, and air lines, with alarmingly increasing labor costs, where could the government come out?"

JOSEPH B. EASTMAN
*Interstate Commerce
Commissioner.*

"Railroads perform a public function, and we would not be embarking on communism if our government took over that function directly as many other countries have done, instead of intrusting it to private enterprise. It is only a question of the way to get the best results."

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Fabricator
banks, etc.
in carbon,

COM

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Canadian A

This

New CE Unit for—

Rochester Gas & Electric Corporation

Station No. 3

Capacity—250,000 lb
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All types of

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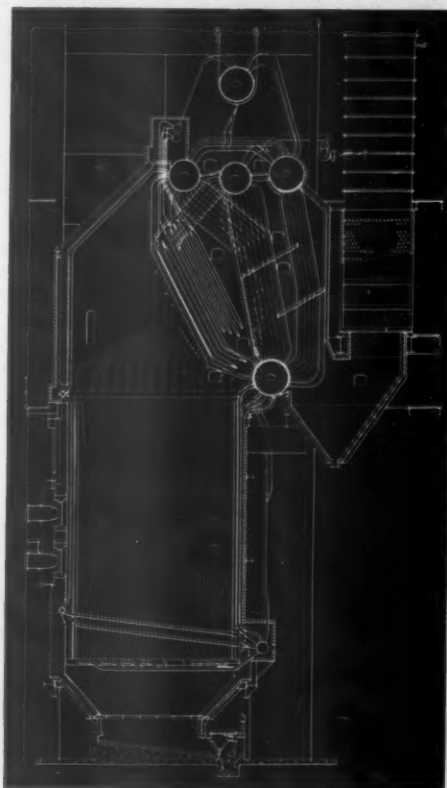
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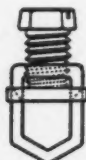
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A battery of four Stowe Stokers burning cheap midwestern coal—at high efficiency.

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thes

1. Brass for inst
2. Greater
3. Sustain
4. Unaffe
5. Withsto
6. Never
7. Control
8. All su
9. Tough
10. Clear c

This



Clear

... **FLAWLESS GLASS** with
BRASS BUSHING—*the IDEAL insulator*

When you "line up" with
HEMINGRAY you line up
these Advantages:

1. Brass bushed smooth threads for insulator pin.
2. Greater mechanical strength.
3. Sustained high dielectric strength.
4. Unaffected by sudden temperature changes.
5. Withstand maximum insulator pin expansion.
6. Never age or deteriorate.
7. Controlled uniformity of product.
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10. Clear and flawless for easy inspection.

● This rugged new Hemingray Glass Insulator stands up better in all adverse weather conditions. It's *brass bushed*, providing perfect threads for uniform contact with pin—permitting quick, full-length insertion—and safeguarding against pin expansion. Its many all-around advantages clearly point to the brass bushed Hemingray as the ideal insulator for low-cost distribution service. All styles in clear and brown color. Ratings up to 15,000 volts. Write for descriptive bulletin . . . Owens-Illinois Glass Company, Hemingray Division, Muncie, Ind.

HEMINGRAY
glass
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This Battery Is Designed for **Exide** Stationary Service



CHLORIDE BATTERIES

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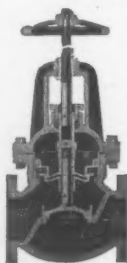
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The World's Largest Manufacturers of Storage Batteries for Every Purpose

Exide Batteries of Canada, Limited, Toronto

PLANT SAFETY

WITH GOLDEN-ANDERSON AUTOMATIC VALVES



Safety Stop Non-Return valves protect lives and property, automatically, against live steam flows due to boiler ruptures or steam line breaks.



Perfect water level control assured by the Altitude control Valve . . . the most efficient and dependable automatic valve for tanks, standpipes and reservoirs.

Ask for your copy of catalog for our complete line of automatic control valves

Golden-Anderson Valve Specialty Co.
1380 Fulton Bldg. Pittsburgh, Pa.



- Alloy tool steels made to exacting specifications
- Old craftsman methods of individual manufacture
- The most rigid inspection and testing of each plier

Klein methods are not mass production methods but for a man who demands a plier of Klein quality there is no way to produce it except the Klein way.

Mathias KLEIN & Sons
Established 1857 Chicago, Ill.

RILEY PULVERIZERS in Central Stations

Plant after plant in the Public Utility industry has swung to Riley pulverizers . . . definitely establishing Riley as one of the leaders

A few Public Utilities using Riley Pulverizers . . .

Union Electric Light & Power, Cahokia . . . Repeat Order
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Potomac Electric Power Co., Washington, D. C.
Oklahoma Gas & Electric Co. . . Repeat Order
Stamford Gas & Electric Co., Conn.
City of Springfield, Ill.
City of Tacoma, Wash.
Savannah Electric Co., Georgia
Dubuque Electric Co., Iowa
Central Iowa Power & Light Co.
Lynn Gas & Electric Co., Mass.
Upper Michigan Power & Light Co.

RILEY STOKER CORPORATION WORCESTER, MASS.

BOSTON NEW YORK PHILADELPHIA PITTSBURGH BUFFALO CLEVELAND DETROIT TACOMA
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COMPLETE STEAM GENERATING UNITS

BOILERS - SUPERHEATERS - AIR HEATERS - ECONOMIZERS - WATER-COOLED FURNACES
PULVERIZERS - BURNERS - MECHANICAL STOKERS - STEEL-CLAD INSULATED SETTINGS

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Complete Protection



Catalog No. W-300 PIT

For outdoor housing of indoor type transformers. Aluminum or rust-proofed steel. Completely weatherproof.

Write today for complete information.

WALKER ELECTRICAL CO.
Atlanta, Ga.

EFFICIENCY ACCURACY ECONOMY

IN THE OPERATION of any power plant, whether steam or water, **ECONOMICAL** operation is dependent on the **EFFICIENCY** of all units.

SIMPLEX METERS, in accurately measuring water input and steam output, provide a permanent and **ACCURATE** check on plant efficiency.

LET SIMPLEX ENGINEERS help you to produce power with greater economy.

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Style Bar-S All Weather Binder FOR METER READING



Write us for circular and details. Send sample of your sheet for prices on any quantity of binders.

GRAND RAPIDS LOOSE LEAF BINDER COMPANY
10-16 Logan Street, S. W. **GRAND RAPIDS, MICH.**

The Mountain Comes To Mohammed



WE realize that most merchants do not have the opportunity of visiting the larger cities to see what is being done in the way of store front design and illumination. They do, however, have a keen desire to pattern their establishments after the style leaders. It is to satisfy this desire to follow the leaders of modern lighting and design that the Pittsburgh Plate Glass Company has started its Store Front Caravan on a nation-wide tour.

The Caravan carries twelve scale models showing the most advanced thought in store front styling and construction. Exact to the smallest detail, including exterior and interior lighting effects, these models will graphically demonstrate what can be done with old-fashioned fronts—and the resulting desire for modernization should be mutually beneficial to all those interested in selling lighting and store front improvement.

You will be advised in advance of the Caravan's arrival in your locality so that you will have ample time to arrange for your lighting prospects to view these models. Use the strong selling power of these scale models to assist in closing your sales. Literature minutely describing the lighting and structural features of these fronts will be available for distribution in these meetings.

For further information on the Caravan write the Pittsburgh Plate Glass Company at Pittsburgh.

CARRARA STRUCTURAL GLASS	PITTCO STORE FRONTS	PITTSBURGH PAINT PRODUCTS
PITTCO STORE FRONT METAL		POLISHED PLATE GLASS
PITTSBURGH MIRRORS	<i>glass...metal...paint</i>	TAPESTRY GLASS
PRODUCTS OF		
<i>Paint</i>	PITTSBURGH	<i>Glass</i>
PLATE GLASS COMPANY		

1936

CAPITAL AND SURPLUS

\$5,000,000

GROWTH



THAT

DEMANDS

RECOGNITION

1901
CAPITALIZATION
\$3500



SPECIALISTS IN
STREET LAMPS

The first Hygrade Lamps were manufactured in 1901. The capitalization of the company was \$3500. Hygrade Lamps entered the market in competition with bulbs produced by the largest manufacturers of electrical equipment in the world. Yet, by the sheer power of their fine quality, they have steadily forced growing recognition of their merits until today demand for them has reached a volume that is the third largest in the country—and the company's capital and surplus is over five million dollars.

A big company—a big name. A concern whose record and product must command respect—and consideration in your scheme. A story of the facts behind such tremendous growth must be worth listening to. It's a story that offers economies as well as quality, a story that is interesting more and more important utilities—particularly on street lighting. A story you ought to know. Ask us to give it to you.

HYGRADE SYLVANIA CORPORATION, SALEM, MASSACHUSETTS

HYGRADE LAMPS

© 1936, Hygrade Sylvania Corp.

Manufacturers of incandescent lamps for over 30 years.
Makers of Sylvania Set-tested Radio Tubes

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TITAN

SNAP ACTION THEROMSTATS

To specify a Titan Snap Action Thermostat is to specify a device tested by wide field experience . . . proven by years of use under the most severe conditions with all types of gas from Canada to the Canal Zone . . . extraordinarily sensitive yet rugged, unfailing in operation, practically fool-proof and trouble-proof, virtually free from the necessity of servicing. Titans are already standard equipment on the majority of storage heaters approved by the American Gas Association. They are available for any size from the smallest to the largest. Write for details.

THE TITAN VALVE & MANUFACTURING COMPANY

Thermostats :: Safety Pilots :: Relief Valves
3205 PERKINS AVENUE, CLEVELAND, OHIO

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WATER HEATER CONTROLS

X-20

20% Less Cost than Average For Your Next Power Plant— Yet With High Performance



WOULD you like your next plant to have high performance, yet to cost 20% less than the average? New installations may approach or better this figure by new and better design which we call the X-20 type. You will find it worth looking into.

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*Specializing In Low-Cost, High-Performance Installations
The X-20 Type*

New and better design

"Our best salesman never says a Word"

*The test of a typewriter is the
typewriter itself, and the
work it does!*



Copyright, 1936, Royal Typewriter Company, Inc.

Put the New Easy-Writing Royal to any test you can think of! Let its performance provide proof of the merits of this great typewriter.

For the New Royal is its own best salesman—master of that most convincing argument of all—perfect results! At its keys, any operator can easily produce *better typing, faster!*

STANDARD OF THE BUSINESS WORLD

That is why the New Easy-Writing Royal is so widely preferred . . . why Royal is now enjoying *the greatest sales of its entire history!*

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*World's largest company devoted exclusively
to the manufacture of typewriters.*

ROYAL TYPEWRITER COMPANY, INC.

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* Trade-mark for key-tension device

FIRSTS that make ROYAL FIRST!

First in **SPEED** . . . Greater volume! First in **EASE** . . . With Touch Control*, Shift Freedom, Finger Comfort Keys. Nearly a score of exclusive improvements! First in **CAPACITY** . . . Greater volume—enhanced quality! First in **ECONOMY** . . . Lower typing costs throughout! First in **DURABILITY** . . . New Royals can take it!



ROYAL: WORLD'S No. 1 TYPEWRITER

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DITTO MAKES QUICK, ACCURATE COPIES OF..

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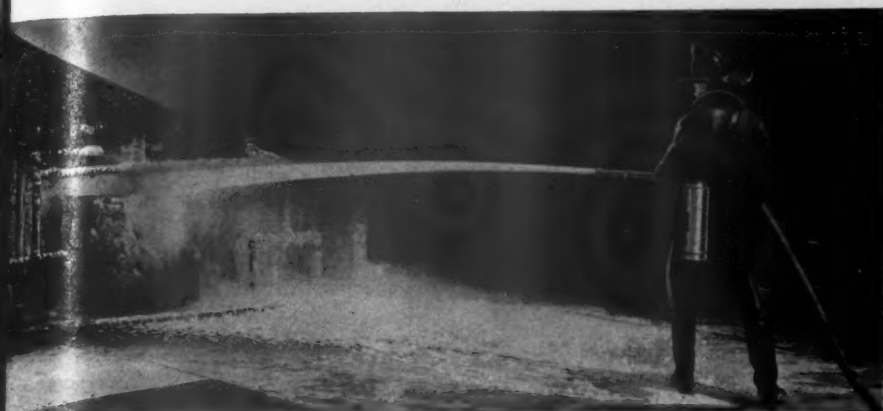
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will save money
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A New Low-Cost Foam Tool!

Combines Water, Solution and Air To Form Fire-Smothering Foam

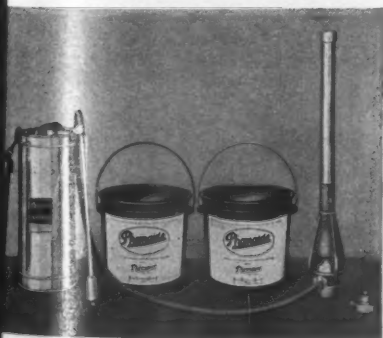
Public utilities are welcoming this revolutionary larger-capacity foam equipment for flammable liquid fires.

The specially designed PHOMAIRE Play pipe connects to your hose line ($\frac{3}{4}$ " to $2\frac{1}{2}$ "). When the water is turned on, PHOMAIDE, new foam-making solution carried in a Hip Pack, and air are automatically drawn into the water stream in the proper proportions to form foam.

There are no complicated preliminaries, no confusing adjustments, no moving parts. And only one man is required at the Play Pipe.

Less than 20 gallons of water at a pressure of 75 pounds or more are required per minute. This is the only efficient foam unit available for small lines. One gallon of Phomaide Solution makes 350 gallons of foam. 300 to 400 gallons per minute may be continuously produced by merely pouring additional solution into the Hip Pack.

This is NEWS. Without obligation, ask for descriptive literature, prices and a demonstration of the Phomaire Unit illustrated at the left. Don't wait! Mail your request now.



Get the Latest Foam Equipment

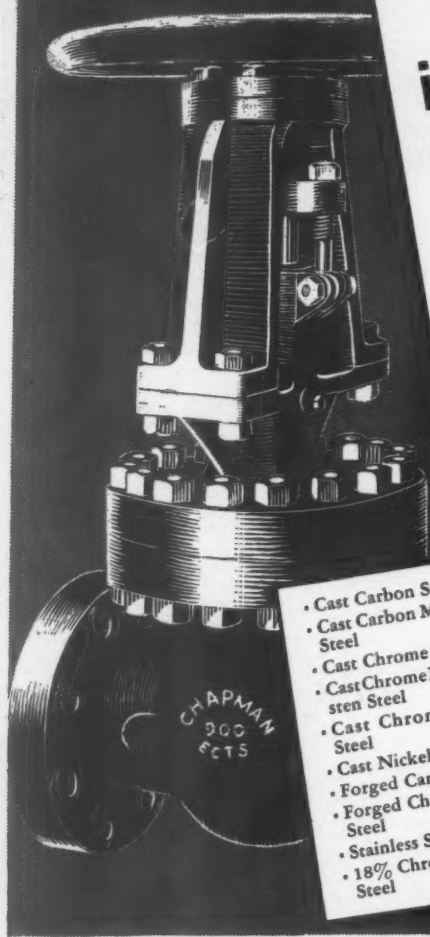
Phomaire and **Phomaide**
PLAY PIPE SOLUTION

developed, made and sold by

Pyrene Manufacturing Company
NEWARK NEW JERSEY
ATLANTA KANSAS CITY CHICAGO SAN FRANCISCO

CHAPMAN VALVES . . .

in the **RIGHT STEEL**
for all **TOUGH JOBS**



The toughest jobs you can give them . . . at the highest temperatures and pressures . . . are too tough for Chapman Steel Valves. The valves are made from special steels poured the Chapman foundries under precise metallurgical control. They are machined to standards of accuracy and finish that assure trouble-free operation and long life. Choose Chapman and you choose economy and safety . . . under all conditions.

- Cast Carbon Steel
- Cast Carbon Molybdenum Steel
- Cast Chrome Nickel Steel
- Cast Chrome Nickel Tungsten Steel
- Cast Chrome Tungsten Steel
- Cast Nickel Steel
- Forged Carbon Steel
- Forged Chrome Tungsten Steel
- Stainless Steel
- 18% Chrome, 8% Nickel Steel

The Chapman line is complete in cast and forged steel, gate, globe and check valves and fittings in ten different steels, for pressures from 150 to 1500 lbs., and for temperatures from 100°F. below to 1000°F. above. Also standard bronze and iron gate and check valves, sluice gates and hydrants. Catalog for the asking.

The **CHAPMAN VALVE**

MANUFACTURING COMPANY

INDIAN ORCHARD, MASSACHUSETTS

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IT'S GREAT TO BE THE WINNER!

Public Utilities everywhere are winning with **FRIGIDAIRE**

● From coast to coast they are smashing all previous refrigerator sales records!

Because—Frigidaire had the range in '36! Well-laid plans, far-sighted sales strategy, and dynamic, sales-compelling advertising backed up a superior product.

"Buy on Proof" made history. The "5 standards" revolutionized refrigerator buying. The "Meter-Miser" captured America.

We gave these ingredients of success, *plus* the most complete, well-rounded sales and advertising campaigns ever known in the industry, to *all* Frigidaire utilities. And they have capitalized on them to make 1936 their greatest refrigerator year!



FRIGIDAIRE CORPORATION
DAYTON, OHIO

YOU WILL DO *still Better* WITH FRIGIDAIRE...IN '37!

FOR DEVELOPMENTS IN ACID RESISTANCE

Consult YOUR *ARCO* Library OF Maintenance Paints

ALERT Engineering and Purchasing Departments are invited to send for this essential Library of Maintenance Data...including (1) Up-To-The-Minute Releases from the ARCO Research Laboratories; (2) Cumulative development, in ready reference form, of 57 years' experience in formulating maintenance paints for Public Utilities. Address: Department F, THE ARCO COMPANY...CLEVELAND or LOS ANGELES.



ELLIOTT

Addressing—Recording— Tabulating and Statistical Machines

Special equipment for Public Utilities, from the smallest to the largest, to meet simple or exacting requirements.

A new system, using rubber plates for printing gas, electric or water bills on postal cards, will be of special interest to utilities using a post-card billing system.

Information on any equipment in which you may be interested will be gladly sent upon request without obligating you in any way.

THE ELLIOTT ADDRESSING MACHINE COMPANY
175 Albany Street, CAMBRIDGE, MASS.

Sales and Service Offices in all Principal Cities

A-E-CO

TAYLOR STOKER UNITS
TAYLOR STOKERS
FURNACES (Water-Cooled)
ASH HOPPERS

Unit Responsibility

THE A-E-CO Taylor Unit brings under the supervision of Taylor engineers the coordination of multiple retort underfeed stokers, water-cooled furnaces, air control and ash hoppers in such a way as to gain maximum efficiency and capacity under any given set of conditions. It centers responsibility for performance, enables selection of the proper stoker drive from the many Taylor have developed—hydraulic, electro-hydraulic, steam turbine, straight line high capacity; permits full consideration to be given to the use of preheated air; insures the interchangeability of replacements for years to come and subsequent use of improved parts and allows for later expansion of existing capacity at a minimum of expense.



Division: **AMERICAN ENGINEERING COMPANY**
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Other Products: A-E-CO LO-HED. MONORAIL ELECTRIC HOISTS, A-E-CO HELE-SHAW
PUMPS, MOTORS AND TRANSMISSIONS, A-E-CO MARINE AND YACHT AUXILIARIES



TELL THEM and you'll SELL THEM



Lamps, toasters, percolators—they all need tags to put your sales message across at the point of purchase. For a tag on your product

1. IDENTIFIES
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3. INSTRUCTS

We make a great variety of tags of all kinds. If you could see samples of our latest work you would find inspiration for tags in your business. Just fill in the coupon and we'll be glad to send you some and prices without obligation.



Send me a few samples of tags that tell them. No obligation of course.

Dennison's

Dept. NL

Framingham, Mass.

NAME _____ POSITION _____

COMPANY _____

CITY _____ STATE _____



1881
1896
1901
1930
1938
KERITE

Out of the experienced past, into the exacting present, **KERITE** wires and cables, through three-quarters of a century of successful service, continue as the standard by which engineering judgment measures insulating value.



THE KERITE INSULATED WIRE & CABLE COMPANY, INC.
NEW YORK CHICAGO SAN FRANCISCO

INTERNATIONAL PUBLIC SERVICE CORP 270 BROADWAY NEW YORK, N. Y.										INTERNATIONAL PUBLIC SERVICE CORP 270 BROADWAY NEW YORK, N. Y.	
DUPLICATE BILL AND COLLECTION		OFFICE HOURS 8 A.M. - 5 P.M.		LAST DISBURSEMENT DAY--		July 20		LAST DISBURSEMENT DAY--		July 20	
W. Thompson 1460 Warren St. City		3 14 1860		W. Thompson 1460 Warren St. City		3 14 1860		W. Thompson 1460 Warren St. City		3 14 1860	
GROSS BILL	NET BILL	METER READINGS	K.W.H. OR C.C.U.F.T.	THERMS	PERIOD FROM	TO	GROSS BILL	NET BILL	DESCRIPTION OF CHARGE	DISBURSEMENT	GROSS BILL
5.28	4.80	1804	1708	108	JUN 5	JUL 6	5.28	4.80	ELECTRICITY	ELEC.	5.28
2.24	2.04	664	6618	34	JUN 5	JUL 6	2.24	2.04	GAS	GAS	2.24
6.00	6.00				JUN 5	JUL 6	6.00	6.00	RECHARGE	MD. SE	6.00
4.15	4.15				MAY 4	JUN 5	4.15	4.15	ELEC. ARREARS	EL. AR	4.15
3.25	3.25				MAY 4	JUN 5	3.25	3.25	GAS ARREARS	GS. AR	3.25
3.00	3.00				APR 5	MAY 4	3.00	3.00	GAS ARREARS	GS. AR	3.00
		RATE SCHEDULE ON REVERSE SIDE									
		CALCULATION OF ELECTRIC BILL									
		K.W.H. LAST YEAR		AMOUNT OF BILL LAST YEAR		K.W.H. THIS YEAR		AMOUNT OF BILL THIS YEAR		NET SAVINGS	
		88		4.80		612		1.32			
\$23.92		\$23.92									

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The complex requirements imposed upon utility companies in connection with Objective Rate Billing are ideally met with the International Electric Bookkeeping and Accounting Method. This machine accounting method provides for the extension, proof and recording of all factors involved in billing complex promotional rates—with no reduction in speed. Note the following exclusive advantages.

1. Automatic recording of basic readings—no transferring of meter sheets.
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3. Automatic extension and proof at a constant speed of 6,000 items per hour, regardless of the number of factors involved.
4. Bills printed at a constant speed (1,200 to 3,500 per hour) regardless of the number of factors printed on the bill.
5. Detailed statistics available as a by-product result.

This plan may be applied with great advantage, to any type of promotional rates. Let us send you detailed information.

INTERNATIONAL BUSINESS MACHINES CORPORATION

GENERAL OFFICES:
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BRANCH OFFICES IN
PRINCIPAL CITIES OF THE WORLD

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EVEREADY

TRADE MARK

INDUSTRIAL FLASHLIGHT

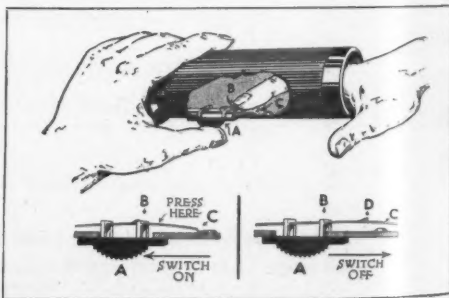
"Built for Rough Treatment"

The "Eveready" Industrial Flashlight is built for ROUGH treatment. The entire outer casing is made of heavy fibre reinforced inside by brass parts to help withstand severe service. The lens and lamp are protected by a special cushioning which softens the hardest impact. This flashlight has no exterior metal parts and it is completely insulated for working around "hot" wires, and therefore prevents shocks and short circuits. The casing will not dent and is not affected by oils, grease, gasoline, alcohol or other solvents and does not deteriorate with age.

The moulded slide switch is positive in operation and slides "on and off" easily. The whole assembly can be readily taken apart and put together without tools. Particles of grit cannot cause trouble.

TO REMOVE: Slide the switch "A" to the "on" position and hold it firmly against the tube with the thumb. Insert longest finger of right hand in tube and press brass contact strip "C" directly in front of lug "B". The pressure releases the latch and the strip will slide out.

TO REPLACE: Hold flashlight as shown and press the switch "A" in the "off" position, holding it firmly against the tube. Insert brass contact strip "C" with the small raised latch piece "D" on the top. Push it through the slot in the first lug "B". Press down on the slide to flatten the "latch". This pressure will lift the end so it may be pushed in through the second lug. Continue to push forward until a distinct click is heard. Then the switch is latched and properly assembled.



NATIONAL CARBON COMPANY, INC.

General Offices: New York, N. Y. • Branches: Chicago, San Francisco

Unit of Union Carbide **UCC** and Carbon Corporation

In the most up-to-date plants in America with planned and routed production is where Modern Group Drive shines. This newer of the two standard methods of applying motor-power to production machines steps up efficiency—and *how* it saves money. Are you using this modern power transmission system that is rapidly replacing old-fashioned line shafts and ill-advised small motors.

★ ★ ★

Modern Group Drive calls for large motors for *groups* of machines and individual motors where required for *single* machines. With planned production this newer, more efficient system increases production and cuts costs. Compared to individual motor drive applied to machines indiscriminately throughout a plant, Modern Group Drive shows savings in installation, operation, maintenance and power costs that no business can afford to lose.

(Excerpts from Power Transmission Council's advertising in *Business Week* and 8 other business publications.)

OUR advertising and educational program, directing the attention of manufacturers to more efficient and economical use of power, is naturally of interest to utility executives. This program is making headway. One of its objectives is more net revenue and better customer relations for the utility. It warrants the support of utility companies who recognize that satisfied customers are the root and branch of any successful service.

POWER TRANSMISSION COUNCIL

75 STATE STREET

BOSTON, MASSACHUSETTS

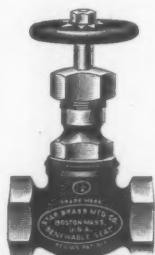
A research association of producers and distributors of power, power units and mechanical equipment for transmitting power.



Star Brass Manufacturing Co.

104-114 East Dedham St.,
BOSTON, MASS.

Makers of Highest Quality
"Non-Corrosive" Pressure and Vacuum Gages—Safety and Relief Valves—Globe, Angle and Gate Valves—Water Gages—Gage Cocks Whistles



New York
Pittsburgh
Chicago
San Francisco
Buffalo
Cleveland
St. Louis
Shreveport, La.

Another Service Call Saved . . . with a



USALITE

**"SHO-BLO"
PLUG FUSE**



*The fuse that shows
"N G" when it blows*

No more guesswork. Your consumers can now spot their blown fuses instantly . . . quickly. You save the costly expense of servicing calls on simple fuse replacements.

Several prominent Electric Light and Power Companies who have already adopted the USALITE "SHO-BLO" self-indicating fuse have effected savings of thousands of dollars in eliminating servicing calls. Convince yourself of the money-saving features of this remarkable self-indicating fuse. Samples in whatever amperage you desire will be gladly sent along to you for your inspection.

Write for samples and further details to-day!

UNITED STATES ELECTRIC MFG. CORP.
222-228 West 14th St., New York, N. Y.
Chicago Branch Office, 323 W. Polk St.

VULCAN

SOOT BLOWERS

*Durable
Dependable
Service*



VULCAN SOOT BLOWER CORPORATION
Du Bois *Pennsylvania*

Call
with a
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SE

Meet the *family* !

YOU don't need an introduction to Hammermill Bond. It has probably worked for you at least some part of the twenty-five years it has served the American business public. But possibly you are not acquainted with Hammermill Ledger for records; Hammermill Safety Paper for checks and negotiable documents; Hammermill Cover for catalogs; Hammer-

mill Offset for advertising broadsides; Hammermill Mimeograph and Duplicator for reports, charts and department instructions. Hammermill makes a range of papers for nearly every business use, and they are all made to Hammermill quality and distributed to printers through the nation-wide merchant group known as Hammermill Agents.



**FREE ... COMPLETE
SAMPLE BOOK**



DIRECTLY ABOVE is shown the Comprehensive Sample Book of Hammermill Papers—more than 221 pages of quick, useful, authentic information on paper selection. $5\frac{1}{2} \times 8\frac{1}{4}$ " in size . . . about $1\frac{1}{4}$ " thick . . . fits snugly in a corner of your desk or in the drawer. Free if you will attach the coupon to your business letterhead.

(PUF 13-3)

Hammermill Paper Co., Erie, Pa. Gentlemen: Please send me your Comprehensive Sample Book introducing the entire Hammermill family.

Name

Address

(Please attach to your business letterhead)

BOILER SAFETY BOILER SAFETY BOILER SAFETY

EYE-HYE

The Remarkable New Reliance Remote-Reading Water Level Gage

It brings an exact reading of your boiler water gage right down to clear convenient eye height.

It brings it down anywhere you want it.

It shows the precise level of the water in the boiler as a bright green liquid, sharply illuminated.

It is accurate and stays accurate. Nothing to get out of order, it is trouble-free. Months of stringent tests have proved its dependability.

It is one of the finest of a long line of fine boiler equipment developed by Reliance engineers. It carries the Reliance assurance of satisfaction.

If your water gages are high up on the boilers, obscured by piping or structure, subject to frequent coating with dirt—if for any reason they're not quick and easy to see, EYE-HYE is what you've been looking for.

See the new Reliance EYE-HYE at our booth at the New York Power Show—or write for complete information.



The Reliance Gauge Column Co.
5930 Carnegie Avenue
Cleveland, Ohio

Reliance

BOILER ALARMS and GAGES

GOOD INSULATORS



Insulators are only as good as the experience and workmanship put into their production.

Our product is produced by men of the greatest experience to be found in the industry.

VICTOR made insulators are Good INSULATORS.

Catalog on request

Victor Insulators, Inc.
Victor, N. Y.

Reserved for

a

MSA Advertiser

Think Also

OF THE SERVICE ANGLE !

... when selecting doors

An accident can put even the best product temporarily out of service. Doors are no exception! And when they are out of order they can cause considerable inconvenience as well as actual monetary loss. So when installing doors be sure to consider the company back of them . . . the organization available for rendering quick, economical service for the years to follow.

Kinnear Rolling Doors not only afford the maximum convenience and economy of operation but are also backed by a nation-wide service organization. In addition, patterns and records of every Kinnear Door sold in the last 40 years are permanently maintained in fireproof vaults. In case of accidental damage you can get prompt replacement service. Kinnear Doors can be repaired in short order, regardless of where you are located. Knowledge of this available service is another reason Kinnear Doors have long been the preference of Utility Officials.

THE KINNEAR MANUFACTURING CO.

2060-80 FIELDS AVE. COLUMBUS, OHIO

Offices and Agents In All Principal Cities



Consult us on your door problems. We have a wood or steel **Upward-Acting** Door for every fire or service requirement.

Left: A Kinnear Steel Rolling Fire Door which not only closes automatically in case of fire but also answers service door needs more economically.

KINNEAR
ROLLING DOORS



**NEW
DIAMOND CROWN
SPEEDLINE STYLING**



**NEW HIGH-COMPRESSION
VALVE-IN-HEAD ENGINE**

CHEVROLET
**THE ONLY COMPLETE CAR—
PRICED SO LOW**

CHEVROLET MOTOR DIVISION
General Motors Sales Corporation
DETROIT, MICHIGAN



**NEW ALL-SILENT,
ALL-STEEL BODIES**



**PERFECTED
HYDRAULIC BRAKES**



**IMPROVED GLIDING
KNEE-ACTION RIDE***
(at no extra cost)

SAFE

For the first time, the very newest things in motor car beauty, comfort, safety and performance come to you with the additional advantage of being thoroughly proved, thoroughly reliable.

New CHEVROLET 1937

The Complete Car—Completely New

**Knee-Action and Shockproof Steering on Master De Luxe models only.
General Motors Installment Plan—monthly payments to suit your purse.*



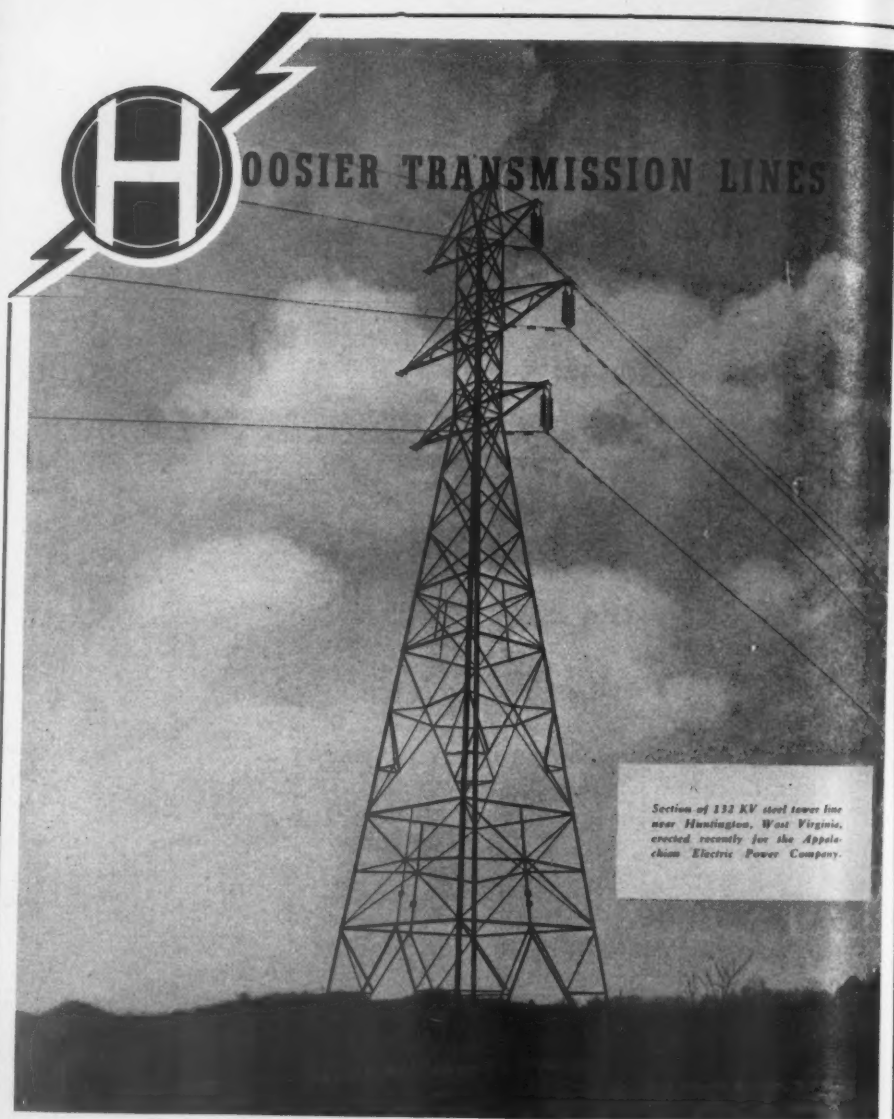
**SAFETY PLATE GLASS
ALL AROUND**
(at no extra cost)



**GENUINE FISHER
NO DRAFT VENTILATION**



**SUPER-SAFE
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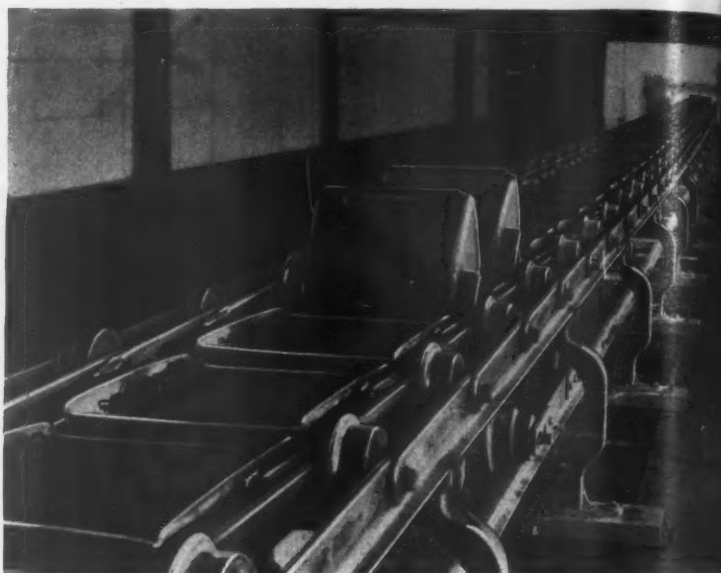
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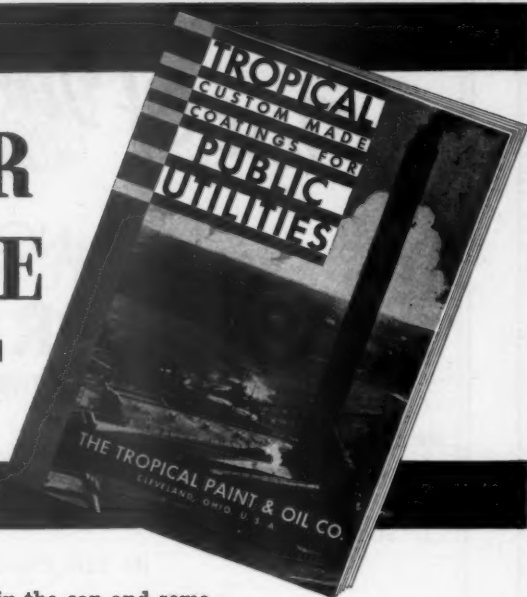
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DATES OF ISSUANCE

Public Utilities Fortnightly is issued 26 times a year—on every other Thursday. There happen to be 27 alternate Thursdays in 1936. The issue of December 17th, therefore, completes this year's schedule of 26 issues. Accordingly, the issue following that of December 17th will be dated January 7, 1937, and not December 31, 1936, as might otherwise be expected.

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Utilities Almanack

DECEMBER



3	Th	¶ Association of Western State Engineers opens annual meeting, Santa Fe, N. M., 1936.
4	F	¶ National Exposition of Power and Mechanical Engineering ends, New York, N. Y., 1936.
5	Sa	¶ Society for the Promotion of Engineering Education, Middle Atlantic Section, starts fall meeting, New York, N. Y., 1936. 
6	S	¶ Investment Bankers Association of America concludes meeting, Augusta, Ga., 1936.
7	M	¶ American Association of State Highway Officials begins annual meeting, San Francisco, Cal., 1936.
8	Tu	¶ Society of Automotive Engineers will meet, Detroit, Mich., January 11-15, 1937.
9	W	¶ Mining & Metallurgical Society of America will convene, New York, N. Y., January 12, 1937.
10	Th	¶ Florida League of Municipalities starts annual convention, Daytona Beach, Fla., 1936.
11	F	¶ American Engineering Council will convene for annual session, Washington, D. C., January 14-16, 1937.
12	Sa	¶ American Society of Civil Engineers will hold convention, New York, N. Y., January 20-22, 1937.
13	S	¶ American Institute of Electrical Engineers will hold winter convention, New York, N. Y., January 25-29, 1937. 
14	M	¶ National Electrical Manufacturers Association will hold mid-winter meeting, New York, N. Y., February 14-19, 1937.
15	Tu	¶ National Warm Air Heating & Air Conditioning Association begins session, Chicago, Ill., 1936.
16	W	¶ American Railway Engineering Association will convene for annual session, Chicago, Ill., March 16-18, 1937.



Photo by Frank Sterrett

Bonneville Construction

*View looking east at the completed half of
the main spillway dam*

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Public Utilities

FORTNIGHTLY

VOL. XVIII; No. 12



DECEMBER 3, 1936

The Quoddy Folly

A grotesque and visionary scheme
for the production of electric power

The cost, in the opinion of the author, if the project should be completed, might easily exceed sixty millions of dollars, contrary to the thirty-six million estimate by the government, which would not mean cheap power.

By HENRY EARLE RIGGS

HARNESSING the power of the tides! That is a problem that has intrigued engineers and business men for centuries. If one looks in the encyclopedias, he will find references to "Tide Mills," and if one follows up the lead, there will be found descriptions of a dozen or more mills in England, some of them dating back as far as 1740, one or two of which were operated for nearly or quite a hundred years. And one will read of many a promoter's dream on which years of effort and much money were wasted only to result in failure and disappointment.

Nor is Quoddy the only present-day project of the sort. A much more ambitious scheme, the so-called Severn Barrage in England, has been a matter of study and investigation by government engineers and commissions for several years.

The maximum range of tides in Passamaquoddy bay is of the order of 26 feet; in the River Severn, the maximum range is about 43 feet. The estimate given out for Quoddy is thirty-six million dollars; that for the Severn Barrage, thirty-eight million pounds sterling.

The English scheme has been under

PUBLIC UTILITIES FORTNIGHTLY

active discussion for twenty years; Quoddy for five or six. On October 12, 1925, the then Prime Minister, Mr. Baldwin, appointed a committee to inquire into the practicability of the scheme. That committee made exhaustive studies and carried out most extensive model experiments over a period of five years. The committee reported in March, 1933. They said:

A power station at the barrage would give only a varying and intermittent supply of electrical energy, unless there was also a secondary station for storage.

That is one of the things that is the matter with Quoddy. The English committee then went on to say:

From the point of view of cost, therefore, the practicability of the barrage scheme depends upon the question whether a secondary storage system can be installed at a cost which would enable the electricity generated by the primary tidal turbines and at the secondary station to be sold at a price less than that generated at the best coal fired station.

And that seems to about sum up the whole question of the practicability and economic feasibility of tidal power. Although this committee worked eight years, it did not report on the secondary system or on the question of the economics of the scheme, and the writer has seen nothing, in recent months, that indicates any wild rush of the British government to build it.

All of the foregoing is written to show that the advocates of the Quoddy tidal power scheme are not alone in their disappointment.

THE plan developed by Dexter P. Cooper, the well-known and highly respected engineer who devoted several years to the project, and whose plans and grants were purchased by the government, was for a tidal power

plant supplemented by a secondary high level plant to furnish power when the tidal plant was out of service.

The tidal plant consists of a series of dams connecting the mainland at Lubec point with Treat island, Moose island on which the city of Eastport is located, Carlow island, and the mainland on the north at Pleasant point. These dams and islands will completely separate Cobscook bay in Maine from Passamaquoddy bay in the Province of New Brunswick, the entire project being within a mile or two of the International Boundary.

The power house will be located at Carrying Place cove on Moose island. A lock for navigation, and sluice gates for permitting the water to pass into Cobscook bay to restore high tide level, complete the structures of the tidal power plant.

Water level in Cobscook bay will be held at high tide level and the plant can only operate when the tide outside of the Cobscook bay pool is more than $5\frac{1}{2}$ feet lower than the water in the pool.

This means that when there is a maximum tide range of 26 feet, the turbines will start as soon as the tide has dropped $5\frac{1}{2}$ feet. The tide will continue to drop for another $20\frac{1}{2}$ feet so that there will be a constantly increasing head until the turn of the tide, then a constantly decreasing head while the tide is rising approximately 16 feet. During the period of operation the water level in Cobscook bay will have fallen some 4 feet or more. Power will then be shut off for a period of approximately five hours. When the water outside has risen to the level of the pool the sluice gates

THE QUODDY FOLLY

will be opened and sea water flowing in will raise the pool to high tide level, when the sluice gates will be closed, and the tidal operation will be repeated.

THIS is the ideal condition. The tide range at Eastport varies from a maximum of 26 feet to a minimum of 10 feet and, of course, on days of minimum tide range, there is only an additional gain over the starting head of $4\frac{1}{2}$ feet instead of $20\frac{1}{2}$ feet.

There are approximately two cycles of tide change from maximum to minimum in each month, so that this tidal power is a constantly varying power, changing practically every minute during the 7-hour period of operation with a resulting increase or decrease of output, and changing from day to day as the tide cycle moves from maximum to minimum.

There is, therefore, no comparability with a hydro plant in a river where the head is constant, and where the dam furnishes storage to maintain the flow in low water periods.

On run of river plants the firm capacity depends on the minimum flow, but the constant head gives uniformity of power generation.

Here, then, is the first great weakness of the Passamaquoddy tidal power project; constantly varying power for seven hours, then no power production at all for five hours. The

Chief of Engineers of the United States Army in his report for 1935, discussing this project, says:

In the absence of an auxiliary source of power, such an arrangement would provide no primary capacity owing to the necessity for shutting down the turbines for intervals of about five hours each day.

PRIME power, or firm power, is defined by the Federal Power Commission as "the power intended to be always available even under emergency conditions."

Without firm power, a plant is valueless. A plant that can operate only seven hours out of every twelve, has no firm power and is, therefore, valueless as a power plant when it stands alone.

There must be a standby plant to furnish power for this five hours, but inasmuch as Quoddy started out to use the tides, it would certainly look silly to build a steam plant to furnish the same amount of power for five hours out of twelve. The building of a steam auxiliary with the same firm capacity as the tidal plant would at once raise the question, Why build the costly tidal plant?

And here comes the most fantastic part of the whole plan. Inasmuch as the Quoddy advocates started out to make the tides do the work, they must, to be consistent, make the tides do the work for the five hours as well as the seven. The following plan is therefore proposed:



"ENOUGH information has leaked out to make it very evident that if one wanted power in large quantities at Eastport, it can be secured by building a modern steam plant for far less than it can be secured by 'harnessing the tides,' however much one might be appealed to by the idea."

PUBLIC UTILITIES FORTNIGHTLY

The main tidal plant will have an initial installation of ten units each, with a capacity of 16,667 kilovolt amperes at 0.90 power factor. The larger part of the power produced by these ten units is secondary power which will be transmitted several miles to an auxiliary power house and pumping station where it will be used, during the seven hours of tidal operation, to operate a great pumping plant which will pump sea water into an artificial storage reservoir or lake of 8,000 acres area, which will be 120 feet above sea level.

Power is to be supplied during the 5-hour period when the tidal power plant is shut down by permitting this water that has been pumped up to flow back into the sea through turbines which will operate two generators.

The transmission lines, the pumping and auxiliary power plant, the high dam, and the artificial lake, are the structures that constitute the auxiliary plant.

THE second great weakness of the scheme is the very high unit investment.

The only authoritative statement of firm power capacity of the project, that the writer has seen, is that it will be 30,000 kilowatts on a 100 per cent load factor, and that the combined plants will be capable of an annual net output of 260,000,000 kilowatt hours of prime energy.

Secretary Ickes, at the time the project was approved, gave out an estimate of cost of \$36,284,000 (of which more anon). Accepting these figures for the purpose of this particular computation, it is obvious that the invest-

ment per kilowatt of firm power capacity is \$1,209.36, which is *some price* to pay for an idealistic dream.

None of the arguments which have been advanced in favor of Quoddy have mentioned the fact that 30,000 kilowatts of firm capacity is to cost \$1,200 per kilowatt.

The argument has been this:

The government is building power plants at Grand Coulee in Washington, and at Bonneville in Oregon; Maine wants Quoddy, let the government build Quoddy.

On pages 60 and 61 of House Document 103, 73rd Congress, 1st Session, appear the estimates of the Corps of Engineers of the U. S. Army on the Columbia river dams. The two dams are estimated:

	Grand Coulee	Warrendale (Bonneville)
Total investment	\$204,483,453	\$67,000,000
Installed capacity	1,575,000	836,000
Per kilowatt	\$130	\$80

THE annual report of the municipal developments of the city of Seattle, shows a total cost to date of the Gorge power development, dams, power houses, transmission line, and 26 miles of railroad of \$14,611,767, and an effective capacity of 57,500 kilowatts, or \$254 per kilowatt, which will be substantially reduced when the full development is installed.

Modern steam plant costs range from \$90 to \$150 per kilowatt. Even assuming Mr. Ickes' estimates to represent the full cost, Quoddy's cost per kilowatt will range from 5 to 7 times as much as any figure on which it could be justified.

Enough information has leaked out to make it very evident that if one wanted power in large quantities at Eastport, it can be secured by building



Adverse Quoddy Reports?

"PASSAMAQUODDY *would never have been built by private capital. It was thoroughly investigated by one of the large power companies and two of the great industrial organizations. Apparently they turned it down. Why? It was thoroughly studied by the Public Works Administration and again turned down. Why? Where are those reports? . . . Certainly there was no prejudice against Maine or Washington county."*

a modern steam plant for far less than it can be secured by "harnessing the tides," however much one might be appealed to by the idea.

The writer has seen no detailed estimates of cost, and so far as he knows none has been published.

According to the newspaper reports, the PWA was asked for aid on the basis of an estimate of \$47,000,000, and Mr. Ickes has officially given out a figure of \$36,284,000. Various other figures have been given or discussed; one very recent article mentioned one estimate of \$60,000,000.

Here is a project which involves dams across nearly two miles of water of varying depths up to 120 feet, or more. The dams will rest on clay from 30 to 100 feet, or more, in thickness, which lies above the rock. Tide ranges up to 26 feet, along with wave action in a great bay, do not make for cheap construction under those conditions.

THE unusual conditions surrounding the design of hydraulic equipment to operate under varying and very low heads, and in salt water, spell long and costly experimentation and study to get the best material and best design, and when design is finally satisfactory, the resulting equipment will be most costly. The turbines are said to be the largest hydraulic turbines in the world.

The Corps of Engineers of the Army includes ample allowances for interest during construction, engineering, clerical and administrative expense, contingencies, and carrying charges whenever an estimate is made. The writer is curious to know what this thirty-six million dollar estimate includes, and how much is allowed for these so-called overheads. Inasmuch as the Corps of Engineers has been on the job for a long enough time to make an exhaustive exploration and study, an authoritative estimate may

PUBLIC UTILITIES FORTNIGHTLY

be expected soon. The writer confidently expects it to include all these legitimate elements of investment cost and to be well in excess of fifty million dollars, and would not be in the least surprised if it reached, or even exceeded, sixty millions of dollars.

There is an immense amount of work to be done, and an immense amount of costly equipment to be installed. The writer's knowledge of the history of construction work in Maine, of the short working season, and the high contingencies, due to winter and storms, cause him to be very pessimistic as to Mr. Ickes' thirty-six million dollars.

THE total salable output of 260,000,000 kilowatt hours is less than $3\frac{1}{2}$ per cent of that estimated for Grand Coulee, but the marketing problem is about as serious at one plant as the other.

Quoddy plant is on the International Boundary. Our Canadian cousins are an independent lot, and seem to prefer to manufacture their own goods and generate their own power. There is not much market, if any, on that side of the line. There are no large centers of population, and not very many people in Maine within an 80-mile radius, and only 150,000 or so within a 100-mile radius of Eastport.

Maine is a water-power state, 80 per cent of the total generating capacity being hydro power. The power company which now serves the territory within a 100-mile radius has, according to the reports of the Maine Public Utilities Commission, only Hydro power. It has 31,500 kilowatts of installed capacity, a little more

than that of Quoddy. In 1933 it generated 103,000,000 kilowatt hours, and sold 86,000,000, which is quite a different story from the 260,000,000 kilowatt hours estimated for Quoddy. Since 1933 the business of the company has increased substantially, in considerable part due to the use of power by the government at Quoddy.

THIS is the local market roughly described as all of the territory between the Canadian boundary on the east, and a north and south line drawn midway between Eastport and the New Hampshire state line, extending north to an east and west line 100 miles north of Bangor.

In other words, there is no non-competitive local business available for Passamaquoddy, and nothing in the area to call for the building of a new plant. Full data as to the operating company are available in Power Series No. 2 of the Federal Power Commission, and in the reports of the Maine commission.

The writer has made an analysis of operating expenses of the existing utility, based on the state utility commission reports and finds operating expenses in 1933 were as follows:

	MILLS PER KILOWATT HOUR	
	Generated	Sold
Generation	0.728	0.876
Transmission	0.155	0.186
Distribution	0.602	0.724
Utilization	0.253	0.305
Commercial	0.784	0.943
New business	0.397	0.478
General	2.501	3.007
Total operating expense ..	5.420	6.519
Interest	3.058	3.676
Taxes	1.665	2.024
Other deductions prior to net income	1.000	1.193
Total operating expense and deduction	11.143	13.412

THE QUODDY FOLLY

If a "yardstick" is going to be established that can be accepted as a Bureau of Standards measure for universal acceptance, it must have all of the above graduations.

The particular one to which attention is directed is that of interest.

IF Quoddy should cost only \$36,000,000 (all of which is added to the national debt on which the taxpayers of the United States must pay interest) and if Quoddy should sell 50 per cent more power than was sold in the area in 1933 or 130 million kilowatt hours, the item of interest alone, at 4 per cent, is 13.846 mills per kilowatt hour or more than the total operating expenses and deductions of the existing company. And the existing company record is about the average of all the larger properties in Maine.

It is perfectly safe to predict that the cost of Quoddy will far exceed Mr. Ickes' figure, and that interest, depreciation, maintenance, and actual operating expenses of this far-flung tidal plant, will approximate 2 cents per kilowatt hour generated, or about the average revenue from total power sales in Maine.

"Cheap power," fine words! The President has used them. The commission headed by Dr. Sills of Bowdoin College used them in the report which secured the approval of Quod-

dy. They are empty words, so far as Quoddy is concerned, *unless the elements of interest on investment, depreciation, and amortization are ignored* when fixing rates for Quoddy power.

When all these elements of actual cost, which must be paid by the taxpayers of the United States, are included in a remunerative rate, there is no possible market for Quoddy power, either locally or at a distance. No industry is going to locate there, unless there really is cheap power, not cents per kilowatt hour, but mills per kilowatt hour and not many of them must be named in order to develop new industries. And if a rate is named that will attract a single industry it will mean that the cheap rate is a direct gift from the taxpayers of the country as a whole. So much for the market.

ONE of the principal arguments for the building of this grotesque and visionary scheme is that conditions in Washington county are desperate, that the canning factories and boat building plants are closed, and that many citizens are desperately in need of the work that would be created by the building of the project. All of which is unfortunately true.

Granting the necessity for made work, that necessity does not justify



Q "‘CHEAP power,’ fine words! The President has used them. The commission headed by Dr. Sills of Bowdoin College used them in the report which secured the approval of Quoddy. They are empty words, so far as Quoddy is concerned, *UNLESS THE ELEMENTS OF INTEREST ON INVESTMENT, DEPRECIATION, AND AMORTIZATION ARE IGNORED when fixing rates for Quoddy power.*"

PUBLIC UTILITIES FORTNIGHTLY

the building of great structures that never can be self-liquidating and which, in addition to a great initial cost, entail millions of dollars of annual expense for maintenance, depreciation, and interest. Quoddy is one of the smaller ones. It starts out as a \$36,000,000 project and will wind up as a \$55,000,000 or \$60,000,000 one with an annual burden of interest and upkeep of the order of \$3,000,000 or more. Grand Coulee started out as "not to exceed" \$63,000,000, and has been changed over to a project estimated by the Corps of Engineers of the U. S. Army to cost \$205,000,000 for power, \$221,000,000 for unneeded irrigation, and \$11,000,000 for navigation, a total of \$437,000,000 investment cost. The annual cost of the power end alone is estimated by Army Engineers at \$11,000,000.

Fort Peck dam started at \$86,000,000 and has reached \$110,000,000 according to the last annual report of the Chief of Engineers of the Army. It is an aid to navigation on the Missouri river. The dam and other improvement work on the river during the four years of this administration will cost \$191,000,000. The annual expense will approximate \$10,000,000.

ALL three projects have been gone into because of the unemployment situation. The two power projects at Grand Coulee and Quoddy, and the Missouri river project represent an investment of over \$450,000,000 and an annual cost of \$24,000,000. For what? There is no navigation on the Missouri river that would justify one tenth of the money spent previous to 1933, and there is no market for power at either power plant.

Had this same money been expended on national highways in the building of grade separations and major bridges, or had it been used in the form of liberal grants in aid of construction of needed local projects, it would have furnished just as much labor; required no more materials and equipment, and been of greater value to the states in which the work was done than these great projects. The good people of Maine should have had their full share of sound projects. It is probably a fair guess that up to now the people of Washington county have had a very small share of the dollars that have been spent.

Passamaquoddy would never have been built by private capital. It was thoroughly investigated by one of the large power companies and two of the great industrial organizations. Apparently they turned it down. Why? It was thoroughly studied by the Public Works Administration and again turned down. Why? Where are those reports? Certainly there was no prejudice against Maine or Washington county. There must have been sound reasoning back of these refusals to build this plant.

THE projects launched during the last three years have been so many, so widely scattered, and many of them so large, that not even the Congress, had it been so inclined, could keep track of them. It is only as they are assuming form, and as the reports and estimates are being studied, which were available at the time of their adoption, that we are beginning to realize what a terrible waste of money and what a burden

THE QUODDY FOLLY

of interest and annual expense to the nation this administration is responsible for.

Passamaquoddy is in many ways the most interesting of the lot. The tremendous power of the waves and tides must have appealed to thousands of men during the centuries of civilization. The little grist mill that did not need constant power could be operated by the tide, and several actually were successfully operated. Modern power must be available twenty-

four hours a day, every day in the year.

Not yet has man been able to enslave the tide for the task of furnishing it. Not yet has man been able to borrow money without interest. Not yet have we been able to build power plants and generate power without finding that interest constitutes the greater part of the cost of production. When we find out how to do these things, Quoddy may be built.



The Mystery of the Missing Railroad Issue

"It is a fact the significance of which should not be missed by the American people, that while for more than a quarter century ending with the political campaign of 1932 the railways were discussed more in national and state political campaigns than any other industry in this country, they were not mentioned once in the national campaign this year by any spokesman of either great political party.

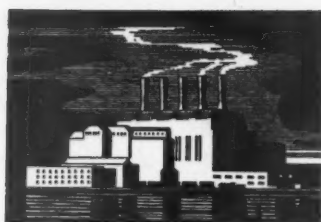
"Have we ceased to have a railroad problem? Quite the contrary. One third of our railroads are in bankruptcy, another one third have barely escaped it, one third of those employed on the railroads in 1929 are still out of work and their net earnings and their purchases from the manufacturing industry are less than one half as large as in that year. Senator Wheeler of Montana has introduced a bill for government ownership which is being supported by all but two of the railroad labor unions. Plainly, we still have a railroad problem.

"Why is it, then, that this problem, long the most discussed of our economic problems, is not being even mentioned in a political campaign which is being devoted almost entirely to the discussion of great economic problems and how government should deal with them? The correct answer to this question may well be pondered by those who are in doubt as to whether they should favor increasing or reducing government in business.

"The railroads had the principal policies of the New Deal applied to them for years before the New Deal for business in general began. Republicans and Democrats joined in passing legislation to regulate their rates, the wages and working hours of their employees, the number of men they should employ in train crews and their profits. They also joined, with the support of many business interests, in making huge expenditures upon waterways and highways to subsidize competition with the railways, at the expense of the taxpayers. . . .

"It would appear from the complete silence of both of them that the Old Dealers and the New Dealers do agree upon one thing—viz., that the policies that have been applied to the railways have not been beneficial to them, their employees, or the public."

—SAMUEL O. DUNN,
Editor, Railway Age.



The Human Angle of Public Utility Service

THE author, a "marcher in the rank and file" of the electric industry, gives his impressions as to the public relations problem, telling how he thinks the customers may be made more appreciative of the value of the service they receive, by selling emotionally what genius and ability have created.

By RAYMOND W. MORRISON

NOT many years ago some of our city quartettes, a few rural as well, were chording out that old refrain, "The World Is Waiting for the Sunrise." That isn't the only event the world has been or is waiting for; it has been waiting for a lot of things—received some of them too—since the days of candle dips and kerosene lamps; but one or more of the greatest thrills it has the right and duty to give as it waits is a sincere appreciation of the benefits it already has received from the creative ability of public-spirited unselfish men and women.

Today the electrical industry itself awaits a sunrise. To insinuate that it has been groping its way in the uncertain light of early dawn or even in semi-darkness is to assume a falsity. However, in attempting to solve some of the problems confronting it, eyes may not have been straight Eastward—possibly a little North or South.

Anyway it may have missed the mark through lack of direction or conception. To paraphrase then the old refrain let it be said that the industry is waiting for the presentation of a workable, feasible plan for public relation.

In looking this problem in the eye it must be remembered that the electrical industry always has had and always will have some kind of a public relation. That is inescapable. Of course what the industry desires is a public attitude that appears fair or even favorable. The great underlying flaw and real impediment to the realization of such a reaction is the belief that good will is something that can be manufactured by direct means; in other words, created by process set up for that particular purpose. This is false, for favorable attitude is based upon deeds, not talk.

Good will does not rest upon a foundation of wind.

THE HUMAN ANGLE OF PUBLIC UTILITY SERVICE

FAVORABLE public attitude is the accumulated product of many efforts on the part of the industry—not to create it—but to serve the public at large. It is the unseen intangible element that gives life and vigor and stamina to all business. No industry can have one eye to its creation and the other to operation. If the desire, or the attempt rather, to create this favorable attitude would just be forgotten correct business functioning normally should take care of anything else.

It will be said immediately that this may not be so, that political intervention, municipal interference, or selfish personal editorial meddling will countervene and probably destroy favorable public attitude. This need not be so. The industry should realize that 75 per cent of business generally speaking is somehow wrapped up in emotion and that the human side of public presentation is just as essential to correct understanding as the perfection of the mechanics of its operation. It is not enough to give efficient service; it is not enough that the customer knows it; it is just as essential that he emotionally realizes the worth of what he receives expressed in terms that he understands and particularly in terms of what he wants to understand. It is true in life that man frequently gets what he desires and often fails to receive what he needs; in other words emotions prevail, judgment sometimes fails.

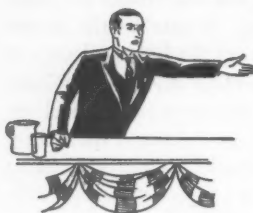
Now a close examination of the functioning of the electrical industry reveals many interesting and intriguing facts. It is an industry that conserves rather than wastes, builds

rather than tears down, completes rather than depletes. It gives effect to natural laws for the benefit of those whom it serves. It catches the water as it tumbles from the hills and puts it to work, it corrects flood conditions, conserves soil, destroys no natural resources. Such an industry, therefore, is ideal and should ideally appeal to the emotions, and to judgment as well. If a correct picture of what the electrical art and its application has done and is doing could be presented in such a way as to appeal to the thoughts and minds and particularly the desires of men, correct public attitude must logically follow—no other reaction is possible.

Why should so much stress be laid upon emotional presentation? Because good will is an emotion. Of course it must not be inferred that the industry intends to sing to its customers or put on a show; no, not exactly. But we might say that much of its presentation is dull, its advertising—local at least—often lacks daring. It portrays too much of what the public expects it to portray and too little of the unexpected, the interesting, the refreshing. It speaks in terms of service, usefulness, cleanliness, availability. True advertising might do well to imply all this only. It oftentimes fails to be evocative, entertaining, and above all fails to find that common ground upon which it must meet the customer in terms of his problems, his needs, his emotions.

BUSINESS sometimes forgets that it and its customers are not headed in opposite directions. They are going the same way. And how shall the going be? Mutually helpful or sus-

Why Not Make Utility Customers Use Conscious?



"WOULDN'T it be interesting to know just how many woodchoppers King Louis the Fourteenth of France had out in the Argonne or some other forest getting out the fuel for winter or how much he had to pay? How did the kings and queens of England heat water for bathing in the old days? Is it really true that palaces became so filthy their occupants had to move out?"

piciously aloof? This question the industry must answer and not the customer. It must go along with him but intelligently and tactfully pick the road.

Another thing that makes for possibly a misunderstanding is the customer is not *use* conscious. Technical engineers have dreamed, designed, created, built, and operated. All the discoveries of earlier days have their spear point in the method of electrical usage today. The development of the industry is certainly a high point in the inventive ability of men and yet, although a 2-year old pushes a button and safely partakes of all the mechanical research behind it, the customer is not use conscious. This surely is an impediment to good will cultivation. Only when an individual has a part does he also have an interest. In this case he buys without a thought to the buying. Of course his day of financial reckoning will come and with it his financial responsibility. But there should be a remedy for this either direct or indirect. Possibly refreshing interesting national or sectional advertising might accomplish it. Life, for example, is expressed in terms of contrast, comparison, everything in terms

of something else. In the electrical industry the comparison relates to conditions under which men and women lived before electricity entered their lives and the way they live today.

WOULDN'T it be interesting to know just how many woodchoppers King Louis the Fourteenth of France had out in the Argonne or some other forest getting out the fuel for winter or how much he had to pay? How did the kings and queens of England heat water for bathing in the old days?

Is it really true that palaces became so filthy their occupants had to move out? Take old King Nebuchadnezzar. There was a fellow who tried to get a lot out of life. How many lamp trimmers or lamp fillers, or whatever they did, were hanging around the night the king threw that big party of his? Isn't all of the above of any interest to the electrical industry or anyone else for that matter? Of course it is.

The most interesting topics in the world are what men have done and are doing; in fact life reaches its full flower in emotional reaction. Truth is indeed stranger than fiction and a

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whole lot more interesting. The development of the electrical industry is so interwoven with the daily actions of men that thousands of interesting stories—presented in the form of electrical advertising—would be read with interest. The reaction—appreciation of what we have today, and appreciation breeds respect and respect produces favorable attitude.

ANOTHER cause for possible unfavorable attitude is the timidity of the electrical industry in the face of open propaganda, falsification, or straight out abuse. Too long has it remained silent when unfairness, unjustness, or even untruth have been presented. Silence may sometimes be golden but it also frequently gives consent, and such silence has had its effect upon the public. They have taken for granted as true many unanswered statements and the effect all around has been tragic,—tragic indeed, when one stops to think and realizes how humanitarian this industry really is, how it has released men and women from physical slavery, so to speak, and produced an environment in which human beings can develop the cultural side of their natures.

That this industry should be subject to unfavorable comment is an indication that presentation has lacked something. Of course some of the public attitude has been developed by selfish interests or political interference but much of this can be overcome if the industry will truly think and act for the benefit of those whom it serves.

No business can permanently succeed that thinks in terms of itself. Life or anything else is not just run that way. Self-preservation becomes

no question at all when an individual or a business thinks in terms of others. For how can it be otherwise? Suppose one individual approaches another and honestly and sincerely shows that he wishes to be of help. Will the other refuse it? If he does, he is either a knave or a fool; maybe a little of both.

ANOTHER thought concerning possible public dissatisfaction. The customer should never be compelled to think that justice can be had by him only through rate cases or commission hearings or rulings.

Differences of opinion between the utility and its customers should never be settled by a public rate case. There are always outside elements eager to rush right in and use such an occasion for their own benefit. If a utility should do a thing, it should do it willingly and voluntarily, if it cannot do it, fair-minded customers should not be void of reason or good common sense.

Leaders in the utility field should be out in the field, out in the districts, looking general and specific situations over, studying needs, and particularly anticipating possible causes for friction or misunderstanding. The company should always be the first to make the move in giving the customer an advantage; for business and those who patronize it must travel together. They do not need to fight for that costs money and breeds ill will and everybody is dissatisfied. No commission should ever have to order a company to do something it ought to do voluntarily.

FROM some of the above it must be gathered that public presentation

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belongs in the field of psychology. It does. Electrical engineers have perfected the art, financiers have not been afraid to pioneer their dollars in building the industry, skilful managers have operated it with remarkable zeal and efficiency, but the ideal department of public approach has yet to be developed. If this at least in part is true the suggestion presents itself that engineers, financiers, and operators have tried to do something not truly in their respective fields. No man plays every instrument in the band nor can he. It may be that public presentation of the industry's case

has too often been flavored by the thoughts, desires, or reactions of those who majored in departments not psychological.

The industry today has research departments, the greatest bit of research work awaiting development is that which deals with men. The industry has done a splendid job of building and operating; but when the mental engineers by their method of public approach sell emotionally what genius and ability have created, then will the public be responsive and appreciative of the industry that means so much in life today.



Electricity Used to Restore Life

NEW light on the old subject of using electric shocks to restore life after death by the same means was presented on June 25, 1936, to the American Institute of Electrical Engineers.

It was a report of an investigation extending over a period of years by L. P. Ferris, B. G. King, P. W. Spence, and H. B. Williams of New York.

They said they found that electric shock may derange heart action causing ventricular fibrillation without damage to heart tissue, but resulting in death within a few minutes. Successful recoveries from ventricular fibrillation have been obtained with large animals of several species by use of high intensity shocks of short duration.

"With about 60 per cent success in recovering animals comparable in size to man from ventricular fibrillation by the application of a rather arbitrarily chosen countershock, further study is desirable to develop the optimum conditions and practical apparatus for utilizing this method in accident cases," they reported.



Back-fire at the World Power Conference

Efforts of New Deal champions of public ownership to strike a responsive chord at the international conclave assembled to study power problems were not, in the opinion of this writer, conspicuously successful.

By HERBERT COREY

THE Third World Power Conference was a success from a technical point of view. The 3,000—give or take 500—delegates and visitors seemed agreed that the high professional standards of the two preceding conferences had been maintained. Politically speaking the conference gave the New Deal a fairly good licking. Perhaps I am confusing politics with sportsmanship in this. The world power conferees—it seemed to me—went away feeling that the New Deal spokesmen are the kind of sportsmen who would shoot a goose sitting.

This is an unpleasant charge to be brought against men who seem really to feel that they have cornered the virtues and harnessed the Decalogue. It should be justified.

The 3,000, more or less, delegates from sixty countries came here to talk business. When they are at home they are completely immersed in the prob-

lems of the industry. Most of their waking hours are given over to it. It is doubtful if a more completely absorbed gathering could be found anywhere. An infinitesimal difference in costs in electrical production may mean all the difference between success and failure. They are industrial scientists and their tools are machines and water and B.T.U. and copper production and psychology and individual income.

They came thousands of miles and at great personal expense to exchange ideas and experiences. The industry in which they are engaged is perhaps more important to more people than any other except the elementary ones of providing food and water. We could get along without snake-nosed trains driven by Diesel engines. We could even go back to brigantines and square-rigged ships. But if we had to give up electric light and power and the conveniences that go with them,

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civilization would slip back toward the Dark Ages.

No doubt each of the 3,000 delegates and visitors is interested, when at home, in state and local political problems. But it was made abundantly evident that they did not consider politics as one of the questions for the discussion of which they came to Washington. They had no cause to promote and no leader to champion. The advocates of the New Deal took an opposite position. They undertook to promote their government-ownership-and-control theories on the time of the conference. They seemed to feel that they had been presented with a sounding board which would project their words around the world. What was said at the Third World Power Conference would be heard everywhere because of the high professional importance of the gathering.

They were not only reprimanded and admonished but they were given clearly to understand that they were out of step with the rest of the world. Public ownership is not a political problem in the other countries represented. It appeared that only in the United States is the question of getting the most out of a great industry for producer and consumer alike obscured by the fog of factional feeling. If that is not getting a licking, then the New Deal is as fine as it says it is, and that's perfect.

The spokesmen for the New Deal were headed by Basil Manly, vice chairman of the Federal Power Commission. He read a temperate, comprehensive, and strictly professional paper in which the position of the

present national administration was set forth. He argued for the establishment of several large super-power areas, in which the production of the units now in existence was to be supplemented by a flood of new power from the big-dam projects now in being, under way, or in prospect. He proposed that the Federal government should have the controlling voice in each. He made it clear that the private ownership of utilities may in the future be accepted only on sufferance. Under his plan full public ownership—or the absolute control of privately owned establishments by the political powers—would be unescapable.

He did not refer to the fact that along with the responsibility for this boss-ship the Federal government would have the recompense of a practically unbeatable political machine. Mr. Manly cannot be unaware of this, for he was schooled by the elder La Follette and Senator George W. Norris and other gentlemen who began to read politics at that place in the book where the average utility magnate stumbles over the big words. He was supported by others who more or less inadvertently made the political motive clear. Dr. Arthur E. Morgan let it be known that he regarded the American Constitution as a tight fence surrounding some especially succulent grass. Others presented Mayor La Guardia of New York as the second greatest Caucasian, bitterly denounced as a class the men who are at the head of the privately owned utilities, and shouted that only through complete public ownership can the blessings of electricity be extended to every one at a rate that every one can pay.

BACK-FIRE AT THE WORLD POWER CONFERENCE

I have read all the formal papers presented to the Third World Power Conference, the stenographic reports of the discussions from the floor, and many of the newspaper articles and editorials which resulted. I believe the foregoing paragraph is entirely fair and truthful. In summary the New Deal spokesmen:

Presented the ownership of utilities by the government as a political doctrine of the New Deal;

Declared for Federal control of utilities which are now privately owned, through a combination of executive mandate and the ability to dump overwhelming floods of new power;

And maintained that holding companies are a device of the devil which must be done away with.

No New Deal spokesman took an opposite point of view. It was made clear that, one and all, they sought control of the utilities through political means.

THIS was entirely contrary to the ideas expressed by the delegates—3,000 of them, more or less, from approximately sixty countries—and to conditions now existing in the rest of the world. Without notable exception the delegates from abroad took a calm, businesslike, nonpolitical position on

the question that has for the last few years so agitated the United States. They made it clear, without heat, that in these other countries the government and the utility maintain what might be called an interlocking relationship. There are, here and there, conditions which have compelled a government to construct, control, and in many instances operate hydroelectric developments. In other instances the government and the utility are in partnership. In some cases the government acts as the financial backer. The vast majority of utility developments have been made by private capital in the sixty countries, and are regulated by the governments.

There was no report of administrative hostility toward the industry such as now exists in the United States. In no country did it appear that the utilities were regarded as a prize of politics. Everywhere, except in the United States, the point of view both of the officials and of the owners was that of business men. The New Dealers became so aggressive in their attitude that some of them were warned not to indulge in "politics and propaganda." Their speeches were characterized in some instances as "tirades." They were told not to continue "advertising." Even Morris L. Cooke, New Dealer extraordinary, and head



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of the Rural Electrification Administration, notified his friends and associates that they must change their tone.

If that is not a licking then my little neighbor is keeping dinosaurs instead of rabbits in his back yard.

GOVERNMENT ownership is established in Russia, of course. But the conditions existing in the other countries participating in the conference will be shown by excerpts from the formal papers and the floor talks. In some South American countries where abundance of water power exists coincident with a need for its conversion into power, and where the investing public is either unable or unwilling to undertake the burden of development, the governments are being compelled by circumstance to take action. But it does not appear from the statements made that these enterprises are based on anything but business reasons, or that any political bias is evident. Conditions in the European countries are made clear by the following brief résumés:

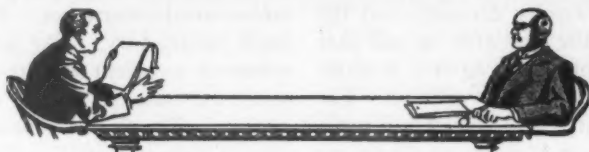
GERMANY: Dr. Krecke stated that Germans consider that the task of government is to supervise and regulate business and not go into business itself. The principal aims of electric power and gas service are reasonable rates and safety, which may only be developed under the guidance of experts conscious of their responsibility. In free competition private enterprise and government should coöperate. Government leadership, we think, should stimulate as well as regulate. We look on private initiative as the stimulating and progressive element in every line of business.

FRANCE: M. Malegarie said that French industry has developed under a system of liberty in conformity with the broad traditions of the nation, without having public authorities ever relinquish their important functions as controlling bodies. The concern with the general welfare facing as it does the magnitude of the problems presented by a power policy found expression recently in the establishment of the Superior Board of Electricity. This board through close collaboration with the representatives of various interests will encourage the proper function of the initiative of private enterprise with a view to the general well-being.

M. H. Fredet told of the "very satisfactory" fashion in which the French republic is extending state aid, with a "limited and beneficial state control." Referring to the interferences inseparable from the conduct of the Great War, another speaker remarked that the present plan of regulation in France was satisfactory and promised well for the future, "on condition, however, that the evolution of the system shall not again be subjected to profound upheaval by new interference by public authority."

GREAT BRITAIN: N. G. Gedge, for the delegation, stated that "a joint parliamentary committee, after sitting several years, recommended in effect that a central advisory water board be created. The principal object is the coördination of interests." By Colonel T. H. Minchall, consulting engineer of London, the British Committee was described as favoring private ownership, the retention of holding companies, and the elimination of duplicated facilities. The British grid,

BACK-FIRE AT THE WORLD POWER CONFERENCE



Business and Politics among Power Delegates

"EVERYWHERE, except in the United States, the point of view both of the officials and of the owners was that of business men. The New Dealers became so aggressive in their attitude that some of them were warned not to indulge in 'politics and propaganda.' Their speeches were characterized in some instances as 'tirades.'"

of which so much has been heard in this country, is not publicly owned, but is an amalgamation and coördination of many privately owned companies. It is managed by a board of six, completely free of political influence. John C. Dalton, manager of the County of London's Electric Supply, implored the conference: "At all costs keep the politicians away from this business of ours."

SWITZERLAND: E. H. Etienne said that "98 per cent to 99 per cent of the whole population is supplied with electricity without interference or terms or subsidies from the Federal government." In the discussion it was stated that "most of the gas plants are publicly owned. Financial difficulties of the state resulted in the use of the gas industry as an indirect means of collecting revenues. For this reason a progressive development of the gas plants is handicapped to a certain extent."

C. F. Lamaitac stated that in Switzerland 98 per cent of the private dwellings are electrified. The domes-

tic consumption is one of the highest in the world.

There is no interference, fortification, or financial assistance on the part of the government. The pioneering was due to private industry. Economic requirements have brought about the interconnection of plants and networks. Cities as well as towns of average size have participated in a general way by repurchasing private plants in existence and then by supplying the capital needed for their rapid development in certain cases on an equal basis with private owners. The Federal government has only technical control to insure the general welfare. There is no movement in Switzerland on the part of the consumer favoring the extension of government participation.

BELGIUM: M. Max Horn said that if he were asked what impression he had derived from the papers and discussions of the conference he would say that a consensus of opinion seemed to have been reached on several essential aspects. It is recognized that duplication of plants must be avoided and existing plants enabled to attain the highest possible degree of usefulness. This involves the creation of a monopoly within an area as large as necessary to obtain the most economic results. Wealth invested in utilities

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should not be wantonly and wastefully destroyed. Equity demands and the interests of the consumer as well that utilities be protected against injuries either from within or without. The great majority of the countries represented at this conference would appear to be adverse to the nationalization of utilities. The Belgian government, for one, would not countenance such a scheme. A wide range of views exists regarding the expediency of compulsory coördination and the point at which governmental supervision becomes interference in the desirable freedom of subordinate authorities of private enterprise. There is an almost universal opinion that the might of the state should be subservient to the rights of the citizen. In approving the principle of coöperation between utility companies he commented:

To say otherwise is to condemn carving knives because they can be used for murder.

He remarked that in the discussion a very large majority of the speakers favored the private operation of public utilities. He put forward his contention that the best method of coöperation is through the grouping of companies through holding companies. He said:

The entire world has taken inspiration from American law and jurisprudence. We have the deepest admiration for the American Constitution and for the reverence paid it. It will be a great relief to see the new law (the SEC) in actual operation and proving that it will be administered with regard for the interests of all and not to interfere with the existence and prosperity of well-organized holding companies.

E. Uytburch, speaking for the Belgian delegation, said that in Belgium there are three methods of utility operation. The first is through private ownership, the second through the col-

laboration of the state, and the third is state-owned enterprises. The first is most satisfactory. The second "has achieved excellent results, especially when the state has limited certain expenses." The third has been very successful "where there have been no expensive expenditures. Unfortunately this has often proved to be the case. This has created vast difficulties." He warned against a tendency toward "a certain mysticism in dealing with the subject of rural electrification. It cannot make a rich region out of a poor one."

SWEDEN: Delegates stated that the "power supply had been developed rapidly and on the whole has been well planned. This has been due to the joint endeavors of the state, municipalities, and private enterprises. No definite line for the development has been set up by the state."

E. Upmark said that the state plants numbered 30 per cent, municipal plants 10 per cent, and privately owned enterprises 60 per cent. He continued:

The supply of power and the utilization of water resources have not been according to a predetermined plan but by a process of natural growth. This has largely been due to the fact that water power in Sweden belongs to the riparian owners, and the state as the owner of the Crown lands has a great many waterfalls. The state with us has the same rights and the same obligations as private owners. Competition is maintained on even terms.

ITALY: Signor C. Cenzato, in a discussion of power in his country, said:

Almost the entire water resources of the country have been utilized without any direct operation on the part of the state. Eighty-five per cent of the production and distribution is controlled by companies which operate as holding companies. The balance is divided almost evenly between public enterprises and small companies. All pub-

BACK-FIRE AT THE WORLD POWER CONFERENCE

lic enterprises without exception in Italy have this form of organization and the state took toward them no initiative in their establishment and has toward them no special control. Ruinous competition is impossible in Italy due to our corporate organization, which recognizes private initiative as an instrument the most useful in the interest of the nation but imposes upon each individual company the duty to relegate its own enterprise to that of the country. Municipal enterprises operate on same basis as private ones, under the regulation of the same law.

NETHERLANDS: Only in the densely populated province of South Holland is electrification provided by the municipalities. No financial aid is granted from the public treasury. If there are doubts a guaranty is asked from the consumers.

AUSTRIA: The socialization measures planned shortly after the war have been completely abandoned. "The Federal government does not participate in supplying current, but grants concessions for the use of water power."

CHILE: "The most efficient means of realizing the objective is through a centralized, independent, and technical organization. Every political, commercial, and local influence should be kept away."

NORWAY: "A centralized governmental direction of all trade has not been the current political policy in Norway. Industry and trade have been left to their own initiative for the most part."

HUNGARY: Because of "the serious injuries suffered through the Treaty of Versailles a law was enacted in 1934 providing for the establishment of new hydroelectric plants and the enlargement of existing plants subject to state grants for sites, etc."

THESE excerpts could be continued almost at will, but further quotation would prove tiring. In view of the New Deal's big-dam plans, however, the statement of A. D. Lewis is interesting. He is the director of irrigation for the Union of South Africa, where the water and soil conditions closely approximate those of some of our western states where big dams are either being planned or are actually under way. Mr. Lewis took a most pessimistic view of the silt menace. He made the following statement:

It would appear that all known methods can but retard silting, and that the original capacity of the reservoir can be maintained only by raising the dams. The financial aspect of this should be considered at the outset, especially bearing in mind that as the reservoirs gradually become shallower and the surface area becomes greater, evaporation, coupled with the concentration of salts, will eventually play an unduly great part and storage will only be useful over short periods.

After hearing Mr. Lewis, the conference was amused by the declaration of H. G. Roby, of the Byllesby Engineering and Management Corporation, that "the TVA will flood per-



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manently more than twice the area ever flooded by the Tennessee river."

The high social note of the gathering was to have been sounded at the banquet, which was held in the great hall of the Union Depot, because of the anticipated impossibility of finding seating space for so many diners. But there was plenty of seating space, although a wicked rumor was spread abroad that government clerks were hastily shrugged into their dinner jackets and told to eat well and clap

their hands at the signal. This may not be true. It is a fact, however, that the applause for some of the New Deal speakers came from compact groups. Birds of a feather, however, notably flock together.

It is perhaps symbolic of the failures of the unwise champions that when for the entertainment of the gathering President Roosevelt attempted to start the turbines at Boulder dam, he pressed the wrong key.



Thumb-nail Essay on Who Pays the Freight

RECENTLY a United States congressman said in substance that everyone except the utility companies pays taxes, *but that utility companies pay no taxes*—an astonishing statement which probably made some utility executives, still possessed of an unruffled disposition, laugh.

This statement that the utility companies pay no taxes may have made even the members of the Federal Power Commission smile, because that commission in its Electric Rate Survey No. 5 state that the total tax paid by reported private electric companies in 1934 had increased to such an extent that they constituted 14.1 per cent of the total revenues of the companies, or the sum of \$239,733,260.

* *

On the surface there would seem to be a marked difference of opinion between the United States congressman who says that utilities pay no taxes and the Federal Power Commission which reports that electric utilities pay taxes to the extent of 14.1 per cent of their revenues. But there is a possibility that when these public officials refer to "payment of taxes" they are thinking of different things. It may be that the congressman meant that it is not the public utility companies but their customers who pay the so-

called utility taxes. If that is what he had in mind, his statement that the utilities pay no taxes would be nothing to laugh at.

* *

The customers of private utility companies usually have to pay a tax to the government for the privilege of receiving the service; and in addition to that a tax in monthly instalments for the use of the service. The bills which they receive from the utility companies are not wholly for utility service. Part of the amount charged is for taxes; that is to say, for political service.

The government employs many tax collectors who receive no compensation for their work. The utility companies from the standpoint of our political leaders, are coming to be regarded as a very popular agency of the government in the collection of taxes from utility customers.

* *

The governments, Federal, state, and local, may get a 14.1 per cent cut on utility revenues but the revenues come from utility customers.

So perhaps the congressman who says that utility companies pay no taxes was wiser than his statement at first appears to indicate. He may have been alluding to the fact that it is the consumer who pays the freight.



Effects of Auto Trailers on Utility Business

Some problems for the electric industry if homes-on-wheels continue to multiply and become more than a passing fad.

By PAGE GOLSAN, Jr.

THE home-on-wheels or the automobile trailer is booming just now and if the rate of growth continues its possible effect on the utility business is worth thinking about. William B. Stout's prediction that the next great industry in America will be the manufacture of homes on wheels and that within thirty years half of our homes will be mobile, has probably surprised many persons. But even more surprising is Roger W. Babson's prediction that half our population will be living in auto trailers within twenty years.

While forecasts are subject to change, there is no question that some sort of a trend has started. Of late the increase has been so rapid that an accurate count cannot be made, but it has been estimated that about 100,000 trailers are now in use. The *Automobile Club of New York Review* recently said:

A large percentage of the 500,000 who tour the country in these wheeled palaces have given up their permanent residences and live in the trailers the year round.

Some two or three hundred manufacturers at present are working overtime to supply the demand for trailers. Their products run the gamut from the luggage trailer selling for \$50 all the way to the luxurious palace car trailer selling from \$1,200 up, having separate quarters for chauffeur and maid. These are a far cry from the home-made tin-can type seen on the road a few years ago, made of an old Ford axle, a few boards, some baling wire, and what have you. And that is one of the notable recent happenings—a definite trend toward the better class of people becoming interested in trailers.

The question is, will the trailer turn out to be a fad or will the trend really take hold and approximate the predictions? Time only can tell. Certainly

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it is time now to do some thinking about it because from here on the utilities may feel the effects.

THE trailer trend affects a mode of life, and changes in modes of life, if they do come about, cause shifts in business that are likely to be drastic. Customers moving out of houses and into trailers certainly will create real changes in domestic electric loads.

The trailer mode of living seems to appeal to certain people. It is inexpensive and it meets the American urge to keep moving. Ground rent for parking is cheap and direct taxes are as yet limited to license tags and the gas tax. Older people living on an income may find this life an easy way to reduce expenses and get away from cares. The greatest appeal, of course, is its mobility. One's home can follow the sun and the pleasant seasons North in the summer and South in the winter—seeing the country from one's doorstep so to speak.

But this trend is not wholly a one-way street. Some other people that I know will not use trailers. They don't like them and just won't ride in them on a bet. But then perhaps they were the ones that said this about automobiles thirty years ago.

Another trend that works against the vast predictions is the crowding of our roads, many of which are even today so loaded as to make auto travel less attractive than formerly. The course of future road building—and where the money is coming from—is a factor in this.

IT is obvious that as trailer life becomes popular, comfortable parks with water, electricity, toilets, showers,

stores, laundry, amusement facilities, etc., will be sought. Already parks that offer the widest range of service are springing up in many localities. Sarasota, Florida, has perhaps the largest with a capacity of about 1,800 trailers. Last winter at times this park was filled.

Not even a guess can be made as to the number of these parks now operating. Their increase being at such a rapid pace, they probably number in the thousands. In addition there are over 300 Federal and state sites.

Most of the trailers being made today carry a lead-in line to be plugged from the side of the trailer into any ordinary electric socket. Here then is a growing load at these parks now ready to be picked up and developed. Yet many of these camps are being laid out by uninformed owners and the utilities can be of real help to themselves by advising the installation of complete electric outlet facilities and seeing to it that the job is soundly designed and put in. North of Washington, D. C., it is said that the camps with outlets are as yet few and far between.

IT might be well worth while to canvass all such parks and also tourist camps (these latter are rapidly adding the trailer parking facilities) in order to start them off right. Aid in drawing up plans and good advice as to wiring would assure adequate capacity.

Some of these camps offer a wealth of amusements to help the trailerites kill the evening hours. Horse shoe courts, shuffle boards, dance halls, card rooms, music, movies, lectures, and even professional entertainers are



Popularity of the Short Trailer Trip

"Is it seriously thought that a substantial proportion of our population will permanently take to homes on wheels? Or will the use be week-end and summer vacation trips? One guess is as good as another, but if any change does come, in all likelihood the short trip period will start first. In fact that is the situation now."

to be found. As most of this takes place in the evening the lighting loads can be stimulated.

SOME utilities are finding revenues from the sale of power to trailer manufacturers. At present the plants are less concentrated than those in the automobile industry, several being in California, Florida, and the East, although a substantial proportion, as might be expected, is in Michigan and thereabouts. If the industry grows a considerable amount of plant integration and merging may be expected, probably resulting in more concentration.

When concrete road building first got well under way the railroads were so pleased with the revenues from hauling cement, sand, and rock that they failed to realize they were helping to build up their worst competitor. In fact they were helping to pay for the job in their tax bill.

Perhaps the sale of power for trailer building will be a mild form of the same thing for utilities.

Is it seriously thought that a substantial proportion of our population

will permanently take to homes on wheels? Or will the use be week-end and summer vacation trips? One guess is as good as another, but if any change does come, in all likelihood the short trip period will start first. In fact that is the situation now. Changes in modes of life as a rule come slowly even though in the end they may be complete. Whatever the period of home vacancy it means that much less residence energy sales and for the permanent movers a loss of residential connected load.

Metropolitan utilities may, during the vacation season, lose some more of the already low summer load. The trailer will naturally seek the places of scenic and climatic advantages and will tend to accentuate the peak seasons of resort and seasonal properties. Resort hotels, however, already sufferers due to the automobile, may find the loss of business even more acute. The load will accrue to the trailer parks.

All of this seems to point to rather definite shifting of load centers away from the large cities and decentralization of load in the summer months.

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THE better type trailer being built today has five or six lights and a radio as its usual equipment with now and then a cooking element. Others have only 6-volt lights operating from the car battery. Some have dual systems with 6-volt lights operating through small transformers when connected to the 110-volt current.

There are several manufacturers trying to push small 6-volt gasoline-electric generators for lighting and radio use. The whole business of design and standardization is yet in a chaotic state and it would certainly be well for the industry, perhaps through the Edison Institute, to take a hand in standardizing so that 110-volt service would be used whenever possible and the further development of self-contained generators and odd voltages be forestalled.

Otherwise the eventual appliance load that some day will be built up may meet obstacles.

Trailer builders should welcome this help.

The question of appliances is going to require some radically new thinking.

REFRIGERATION by electricity certainly is to be desired but it will take ingenuity. During the day, when on the move, only 6 volts D. C. is available and the ordinary automobile generator cannot carry this load without alterations. Continuous cooling at night on 110 volts, with no daytime cooling would hardly be practical in our present type of refrigerators. A new type of refrigerator, however, may be developed that can make ice at night and store enough refrigeration to hold down the box temperature for

power gaps of fifteen to twenty hours. Perhaps some liquid, more efficient than water, can be used for this purpose. Another plan would be to use a 6-volt A.C./D.C. box and with a larger generator on the car supply the day load. Night load would come from a small step-down transformer connected to the power lines.

Electric cooking has its only drawback in the noon meal along the road. A trailer camp with electric outlets could of course be scouted out. Or the noon meal, as is so often done in the summer time, could be taken cold.

Space heating, as yet to come for trailers, seems to offer an excellent load. The element would probably be left on for a considerable time on chilly nights—and most nights at resorts are chilly both North and South.

The characteristics of the trailer load leave much to be desired. The load factor is poor and the energy used per person at best will be small. Two or three people, so to speak, are in one room whereas at home the same family would dispose itself in several rooms in which different individuals may be reading or burning lights.

THE average trailer stops for the night, uses its electric plate, turns on the radio for one or two hours, uses the lights for a short while, then cuts off. Reading and study will be curtailed. After a day of driving eye-strain reading will not be attractive and not many books for study will be taken along. In good weather the tendency may be to sit outside the trailer with the lights off, perhaps listening to the radio or visiting a nearby movie or amusement.

How the load factor can be im-

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proved is a problem that is ahead of us. No doubt much can be done.

The cost to the trailer park of the electricity will mostly be in the demand clause, because of the simultaneous use of all appliances for the short period. Space heaters will be the exception. This charge has to be passed on to the trailer guest on an attractive basis and the utility should cooperate with the camp owner in helping him figure out his basis of charge. Several methods are now in use:

1. A flat rate per trailer per night or per week, which figure includes electricity;
2. Step rates based on the connected load in the trailer, and
3. The coin meter. One camp in Florida whose rates are not as high as some others charges a base rate of \$1 per trailer with two persons without service. If electric lights are used the rate is \$1.35 per week. The scale increases up to \$2.50 a week for two people with unlimited lights and electric heat, entertainment of various

sorts, loud speaker hook-up to the radio for phone calls, etc.

AFTER reviewing all of these possibilities and trends what is the answer?

My own conclusion is that our continued increases in residential consumption will so accelerate that it will take a considerable period of years and a very large trend to trailers before losses will be noted. It must not be forgotten that there are some other trends in the air such as television, the effects of which may cause marked increase in home consumption.

I think the trailer trend will be more than a fad and will reach fair proportions. However, until we are further along I cannot hold with predictions that affect one half our homes.

At the same time the load offered by the trailer camps will grow at a surprising rate and it should be well worth going after.



Telephones from Electric Sockets

How conversation between two persons can be heard over telephones plugged into electric light sockets was recently demonstrated in the auditorium of the New York museum of science. The telephones operate on the principle of carrier-currents, superimposed on the electric light wires, with no riggings required but the usual cords to the attachment plugs.

Each instrument, when talked into, becomes a small radio-frequency transmitting station which delivers "wired radio" to the electric light circuits. The voice then is picked up, amplified, and heard as a portable radio.

—BOSTON POST.



Financial News and Comment

By OWEN ELY

The Outlook for Utility Stocks

UTILITY stocks have been handicapped marketwise by the presidential election campaign, which doubtless resulted in some switching of utility to industrial stocks by investors. The Dow Jones average of utility stocks has now been "making a line" around the 35 level for the last four or five months, while the industrial average advanced from 160 to 184 and the rail average from 50 to 60.

Meanwhile, earnings of many large utility systems have continued to increase rapidly. Weekly statistics of electric output also make a favorable showing, considering the rate of gain which occurred at this time last year; for the week ended October 31st, electric output was 14.7 per cent over last year. However, the *Times'* seasonally adjusted weekly index, which had advanced sharply from April to August, has in the past two months shown an irregular or declining trend, possibly due to the slowing down of the automotive industry or approaching election. This temporary irregularity is similar to that which occurred in the first three months of the year and hardly indicates any real change in trend; it could continue for another month or so without breaking the uptrend line in the index prevailing since the middle of 1933.

In the writer's opinion, utility common stocks are decidedly "behind the market," and any favorable court decision, such as possible rejection by the Supreme Court of the Electric Bond

Case as a test for the Utility Act, might cause a sharp rebound in the group.

Any new developments in the power pool proposal of President Roosevelt might also prove a market factor, particularly with regard to Commonwealth & Southern, National Power & Light, and other companies more immediately affected.

BUT regardless of these temporary influences, the market cannot long continue to ignore the industry's recovery in earning power. There seems no reason to doubt that electric output will continue to gain in 1937, owing to the increasing sale of household appliances, the growing demands for power from the heavy industries, the gain in building operations, etc. It is possible, of course, that advances in material costs and wages may deprive utility companies of some of the benefits to net income otherwise obtainable from the increased gross revenues.

On the other hand, some relief may be obtained from imposition of special taxes, and the pressure for rate cuts may diminish. While substantial economies have already been obtained from refunding operations, these will be more fully reflected in 1937-8 figures, and utility plant expansion will permit savings through installation of more efficient machinery.

Thus it appears likely that, unless pressure from the administration for rate cuts and for new bookkeeping methods prove too burdensome, net earnings will continue to gain, although

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at a smaller rate of increase than in 1936. The industry is favored by a natural trend toward "increasing returns"; it has few labor, inventory, or credit problems; it has been soundly built and financed; and if relations with the Federal government can be gradually adjusted and ameliorated, future prospects should prove increasingly favorable for security holders.

New Financing

PRESUMABLY due to election uncertainties, new financing was at low ebb in the fortnight ended November 7th. Utility offerings included \$14,000,000 Central Maine Power Co. first and general "H" 3½s of 1966 at 101¼; \$13,906,900 New York State Electric & Gas Corporation first 4s of 1965 at 102; and \$2,300,000 Montana-Dakota Utilities Company 4½s of 1946 at 100. \$10,067,000 New England Power Co. first mortgage 3½s of 1961, Series "A," were offered November 12th at 103½ by a syndicate headed by Lehman Bros., as the result of their successful competitive bid for the issue. (SEC regulations require the filing of an amendment to the original registration by the successful bidders.)

Other issues registered with the SEC for probable offering in November include the following: \$160,000,000 American Telephone and Telegraph 30-year debenture 3½s; \$1,500,000 Shenango Valley Water first "B" 4s of 1961; \$15,000,000 Southern Natural Gas Company first 4½s of 1951; \$250,000 Montana State Water Co. first 5s of 1961; \$1,770,000 Ohio Associated Telephone first 4½s of 1966; \$6,000,000 Broad River Power Company first 4½s of 1966; and \$3,000,000 Turners Falls Power Co. 3s of 1956 and 3½s of 1966. Competitive bidding will be necessary on the last-named issues. The scheduled offering of 130,000 shares of Washington Gas Light Co. capital stock has been delayed.

The Federal Power Commission has filed a hearing for November 17th on

the application of Montana Power Co. (subsidiary of American Power & Light Co.) for authority to issue \$48,000,000 first 3½s due 1966 and \$10,589,500 debenture 5s of 1966.

There has been some special interest in the financing plans of Montana Power Co. because of its affiliation with the Electric Bond & Share System, involved in the government's test case to determine constitutionality of the Utility Act. According to the *New York Times*:

The recent proposal by the Montana Power Company to issue about \$49,000,000 of new securities is interpreted in investment circles as indicative of the attitude of those utility holding companies which have not complied with the provisions of the Public Utility Act toward the legality of carrying out refunding operations. In the opinion of some observers, the successful completion of such an operation would release a tremendous amount of potential utility refinancing, which heretofore has been curtailed pending the decision on the constitutionality of the holding company legislation.

The Florida Power Corp. (Associated Gas & Electric system) has asked permission of the SEC to change its financing previously authorized and to issue \$10,000,000 first 4s of 1966 and \$2,500,000 debenture 5s of 1946 (instead of \$12,000,000 first 4½s of 1976).

The public service commission of New York has authorized Rochester Telephone Corporation to issue \$5,000,000 first and refunding 3½s of 1961.

Central Hudson Gas & Electric Corporation recently made an exchange offer, holders of the old 6 per cent preferred stock receiving one share of 4½ per cent preferred plus \$2.50 in cash. Some 3,404 shares, which remained unissued out of the 70,300 shares of new preferred, will be offered at 107½ by Morgan Stanley & Co., according to a post-effective amendment filed with the SEC.

Value of Holding Companies

C. W. KELLOGG, president of the Edison Electric Institute, in a recent address made the following statement:

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It is obvious that if the financial condition of the electric industry is as sound as the last census has reported it to be, no one but the holding companies could possibly be responsible for this state of affairs. Without the 50 per cent margin of investment furnished by the stockholders utility bonds would be unsalable, and without the equity cushion furnished by the common stockholder the preferred stock could not be marketed.

The common stock has, in fact, furnished 64 per cent of the equity margin for utility bonds. Hence the common stock investment is the real foundation of the whole financial structure.

Individual companies outside the larger cities never could raise common stock money. It was only when the holding companies came along, with the size and diversity which their holdings represented, that common stock money in adequate amounts could be raised.

The value of the holding company from an engineering angle was recently stressed by the *Annalist*:

One result of the drought was to demonstrate the vital utility of the network of high tension interconnections developed by the privately owned power companies in the last decade and a half, especially those made possible by the much maligned holding companies. Many if not most of the major interconnected systems would have been impossible without the financial resources provided by holding companies, and in some sections of the country the absence of facilities for long-distance transmission of electric power during the drought would have intensified human suffering and from an industrial and employment standpoint would have been nothing short of disastrous.

Corporate Notes

CONSOLIDATED Edison Company has declared an extra dividend, making disbursements payable this year \$1.75 a share compared to \$1 last year. The regular quarterly rate was raised from 25 cents to 50 cents in the September quarter. The distribution will, it is thought, avoid payment of any undistributed profits taxes for 1936.

The Utilities Power & Light Corporation litigation has become more involved. Harley E. Clarke, who recently retired from the presidency of the company which he founded over twenty years ago, has been in conflict with

Atlas over the right to exercise an option to buy the debentures held by Atlas at a price of 80, as well as \$3,000,000 securities held in an affiliated holding company. The latter included certain notes of Webster Securities Corporation (personal holding company of Mr. Clarke) which controls Public Utilities Securities which in turn controls Utilities Power & Light. Webster Securities defaulted on its notes, which were taken over by the Atlas from the RFC, which had acquired them from the Central Republic Bank & Trust Co. of Chicago in connection with the celebrated \$90,000,000 "Dawes loan." Mr. Clarke on October 14th served notice on Atlas and the Manufacturers Trust Company, through the sheriff of New York county, of a suit in equity to gain extension of his option, in which he alleged that he had entered into the option agreement only with the assurance that the British properties would not be sold. Several suits have been brought by security holders opposing the recent sale of the British properties on the general ground that it benefited Atlas, and two additional suits seeking bankruptcy were brought recently at Chicago.

Peoples Gas Light & Coke Co.'s proposed rate increase, expected to yield about \$3,000,000 additional gross and \$2,500,000 increased net income per annum, has been temporarily delayed by a writ of supersedeas issued by the Illinois Appellate Court, which places rates on the old basis pending consideration by the court.

AERICAN Telephone and Telegraph Co.'s subsidiary, Electrical Research Products (controlled by Western Electric Co.) is benefiting by replacement demand from theaters which are installing improved types of sound reproduction apparatus. The company is said to have received orders since September 1st to equip over 300 theaters with its new and improved Mirrophonic equipment. Western Electric's production of telephone apparatus is also reported to have gained.

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The contest for control of the Jersey Central Power & Light Co. has taken a new turn. The question has arisen whether the Federal court should take jurisdiction and this question will probably go to the circuit court of appeals. Hence, the date for the auction of the collateral securing the National Public Service debentures (which constitutes control of Jersey Central) will be postponed to a date not later than November 27th, it is expected, at which time the option of the Public Service Corporation of New Jersey to pay \$8,000,000 for the controlling interest will expire.

While the recent success of the Fascist forces in Spain is generally considered favorable to the future relations of International Telephone & Telegraph Co.'s subsidiaries, the decree declaring militarization of Spanish Telephone Co. may (unless changed by General Franco) prevent the parent company from obtaining any funds from Spain for some time. However, it is understood that the government will indemnify the company for all damages as well as for loss of revenue. As the *New York Tribune* points out, "Revenue from other subsidiaries should be sufficient to prevent financial embarrassment to the system; ITT has gone through thirteen revolutions without appreciable loss."

SPRINGFIELD, Ill., voters have rejected by a vote of almost 3 to 1 the proposition for the city to purchase the plant of the Central Illinois Light Co., subsidiary of Commonwealth & Southern Corp. A proposed \$8,500,000 bond issue would have doubled the city's debt with the prospect of additional taxes. The city's own plant and that of Central Illinois have been in active competition for many years. The plan for municipal purchase had been backed by leading representatives of TVA and SEC, but Central Illinois Light Co. took no part in the campaign.

Derby Gas & Electric Co., subsidiary of Utilities Power & Light Corp., has submitted a reorganization plan to the SEC in accordance with the Utility Act.

Note holders of the U. S. Electric Power Corporation have purchased at auction, at \$2.80 per share, all the common and Class B common shares of Standard Power & Light Corp. securing the notes. This was the price at which they had previously offered the shares to U. S. Electric Power stockholders, the latter having arranged to take about 40 per cent of the total stock. The note-holding syndicate had previously acquired the notes from the Chase National Bank and other banks, on a basis substantially equal to the price paid for the stock.

September Earnings Reports

THE following summarizes the available September reports for leading systems, on a consolidated basis and subject to year-end tax adjustments:

American Gas and Electric Company in the twelve months ended September 30th earned \$2.14 per share on the common stock against \$1.80 in the previous year. Net income for the month of September showed a gain of about 22 per cent over last year.

Cities Service Company in the nine months ended September 30th reported a gain in net income of about 39 per cent over last year.

Pacific Lighting Corporation in the twelve months ended September 30th reported \$4.01 earned per share on the common stock, compared with \$4.05 in the previous year.

Public Service Corporation of N. J. in the twelve months ended September 30th earned \$2.65 a share on the common stock against \$2.63 the previous year. Net income for the month of September showed a gain of about 10 per cent over last year.

Engineers Public Service Company in the twelve months ended September 30th reported 33 cents earned on the common stock, compared with a deficit of 66 cents in the previous year.

United Gas Corporation in the twelve months ended September 30th earned 14 cents on the common stock against a

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deficit of 63 cents in the previous year. In the quarter ended September 30th net income was over four times as large as last year.

United Gas Improvement Company in the twelve months ended September 30th earned \$1.07 on the common stock, against \$1.12 in the previous year. In the quarter ended September 30th, 25 cents was earned, the same as last year.

Brooklyn Union Gas Company in the twelve months ended September 30th earned \$3.26 per share against \$4.57 in the previous year.

Commonwealth Edison reported \$6.50 earned in the twelve months ended September 30th, against \$6.29 in the previous year; in the quarter ended September, \$1.28 was reported compared with \$1.02 last year.

Consolidated Edison Company of New York reported \$1.53 in the twelve months ended September 30th, against \$1.98; in the quarter 39 cents was earned, the same as last year.

Consolidated Gas, Electric Light and Power Company of Baltimore reported \$4.59 in the twelve months ended September 30th, against \$4.24 last year; in the quarter, 83 cents compared with 86 cents.

Detroit Edison in the twelve months ended September 30th reported earnings of \$8.73 compared with \$4.93 in the previous year.

EDISON Electric Illuminating Company of Boston reported \$8.90 in the twelve months ended September 30th, against \$9.73 last year; however, in the quarter ended September 30th net income showed a gain of about 45 per cent over last year.

Long Island Lighting Company in the twelve months ended September 30th earned 18 cents compared with 31 cents in the previous year.

Peoples Gas in the twelve months ended September 30th earned \$1.89 compared with \$1.95 in the previous year; in the quarter ended September 30th there was a seasonal deficit of 37 cents, compared with 48 cents last year.

Public Service Company of Northern

Illinois in the twelve months ended September 30th earned \$3.82 per share on the common stock compared with \$3.25 in the previous year; in the quarter ended September 30th, 49 cents against 34 cents.

Southern California Edison Company reported \$2.37 earned in the twelve months ended September 30th.

American Telephone and Telegraph Company in the twelve months ended September 30th earned \$8.02 per share, against \$6.56 last year; in the quarter ended September 30th, \$2.31 against \$1.70. On a Bell System basis, earnings were \$8.87 against \$6.38, and \$2.30 against \$1.56.

Philadelphia Company in the year ended September 30th showed a gain of 22 per cent in net income.

National Power & Light Co. in the quarter ended September 30th earned 15 cents a common share against 11 cents last year. In the twelve months ended September 30th, 93 cents was earned against 81 cents last year.

NIAGARA Hudson Power Corporation for the quarter ended September 30th reported 4 cents per share compared with 7 cents last year. In the nine months ended September 30th, 58 cents was earned compared with 44 cents, a gain of about 32 per cent.

North American Co. in the twelve months ended September 30th reported \$1.60 earned per share on the common stock compared with \$1.23 in the previous year.

American Light & Traction Co. in the twelve months ended September 30th reported earnings of \$1.65 against \$1.15 a year ago.

Commonwealth & Southern Corp. for the month of September reported net income of \$1,157,351 against \$769,566 last year. For the twelve months ended September 30th, \$7.80 was earned on the preferred stock against \$5.67 last year, a gain of about 38 per cent. Eight cents per share was earned on the common compared with a deficit of 2 cents last year.

Electric Power & Light Corporation

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in the quarter ended September 30th reported earnings of 14 cents a share on the common stock compared with a deficit of 52 cents last year. For the twelve months ended September 30th \$9.25 was earned per share of preferred stock against 6 cents last year, and 41 cents per share of common compared with a deficit of \$1.67 last year.

B.M.T. reported earnings of 88 cents per share in the quarter ended September 30th, compared with 49 cents in the same period last year (after revision of last year's figures). The trolley subsidiary, Brooklyn & Queens Transit, continued to show a declining trend.

portation, and an agriculturally perfect climate."

Japanese Nationalization of Utilities Opposed

JAPANESE utility companies are opposing the proposal for nationalization of the electric power industry (described in the previous issue of the *FORTNIGHTLY*). The extent of government control will probably be settled between now and January, when the government is expected to propose definite legislation to the Diet. It is claimed that the plan will permit reduction of the wholesale cost of power by one fifth, while plans to increase the output of hydraulic power by 300,000 kilowatts annually will help solve the unemployment problem. The government would not invest any money in the holding company but would guarantee its bonds.

The Japanese Communications Minister, in supporting the proposal, referred to "the present system of reckless establishment of a multitude of minor power companies."

The proposal is said to have originated in Army circles as a national defense measure. Other Cabinet ministers, including the Navy, have not as yet announced a definite stand, although the Navy is said to agree with the War Department that vigorous control of the industry is the first step in a general reform of the economic structure. There appears to be considerable opposition to the plan among business interests who regard estimates made by the Communications Ministry of 20 per cent rate savings as greatly exaggerated. The argument is following somewhat similar lines to that in the United States, with charges of unconstitutionality and bureaucratic inefficiency leveled against the government. However, it seems likely that, considering the strong hold which the Army has over national affairs, its viewpoint may prevail with some modifications.

The Cost of Federal Projects

FORTUNE for November presents "a portfolio of New Deal reconstruction"—which includes pictures, maps, and comment on leading Federal power projects. The total cost of TVA up to 1944 is estimated at some \$329,000,000. Grand Coulee's total cost, including irrigation plans, is figured at \$376,000,000 and Bonneville's at \$67,000,000, with a long-term eventual cost for the entire Columbia river development estimated at \$772,000,000. Cost of the Fort Peck dam on the Missouri river is figured at \$108,000,000. According to *Fortune*, TVA is a "frank experiment" and the benefits from the other three dams "are strongly disputed. Grand Coulee and Bonneville are the first steps in the Columbia river development, which contemplates an eventual power capacity of 8,000,000 kilowatts in an area now inhabited by fewer than 3,000,000 people. This is about 24 per cent of the total power capacity in the U. S. in 1935. Utilities men do not see how so much energy can ever be sold. And the New Deal answer is at best a pious hope that by the time the project is finished many an industry will have shifted to this last U. S. frontier to receive its triple blessing of cheap power, cheap trans-



What the State Commissioners Are Thinking About

Excerpts from the opinions expressed in reports and addresses at the annual convention of the National Association of Railroad and Utilities Commissioners in Atlantic City, N. J., from November 10th to November 13th, 1936.

On Accounting Reform

"THE reports of the Federal Trade Commission cite cases where the property accounts of utilities have been increased 100 per cent over night. A system of accounts cannot prevent such transactions. It is not within its province to do so, but it can and should provide an account where increases of property over original cost, caused by reorganization, mergers, or consolidations, should be recorded in order that regulatory commissions and the investing public may be informed as to the property accounts of the utilities. The use of original cost in utility plant accounting provides a means whereby the detailed plant accounts will record the original cost of the property, and give the difference between such original cost and the purchase price recorded in the separate account.

"Criticism has been made of the use of estimates in determining original cost where proper records are not available. There is nothing new in the use of estimates in utility accounting. They are made daily in the allocation of expenditures between utility plant and operating expense accounts and between the detailed utility plant accounts. Overheads capitalized in construction are usually a matter of estimate. The division of labor cost between pole lines and overhead conductors is frequently made on an estimated basis. I am not criticizing such estimates. They are necessary in the conduct of utility business. Neither do I fear the consequences of estimates of original costs where necessary. They can be made with as great a degree of accuracy as could

be found under any method of recording utility prices."

—FRED S. HUNT,
*Commissioner, Public Service
Commission of Wisconsin.*

"THOSE opposed to the recording of original cost have expressed apprehension concerning the cost of its inauguration, claiming that the expense of ascertaining and maintaining original cost records would far exceed any possible value. It is common knowledge to all connected with the regulation of utilities that a considerable portion of their property is carried in their accounts under a caption 'Fixed Capital Not Classified by Prescribed Accounts.'

"This account is very uninformative and its use has caused a great deal of dissatisfaction among all concerned with utility plant accounting. The account simply shows a total dollar amount without stating how much is land, structures, generating equipment, transmission and distribution facilities, water power value, or intangibles. Mr. A. R. Colbert, director of our accounting department, has made a review of the records of a few Class A companies and finds that of upward of \$100,000,000 of property 34 per cent is carried as fixed capital not classified by prescribed accounts. This amount should be classified, and no matter what methods of classification is followed, about the same expense is incurred. If it is classified on the basis of reproduction cost, cost to company, original cost, or any other

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kind of cost, essentially the same procedure is necessary. Utilities have been at fault in permitting amounts of undistributed property to accumulate in their accounts. It is high time that steps be taken to remedy this situation and that the undistributed property accounts of utilities be classified in accordance with the prescribed utility plant accounts on the basis of original cost."

—FRED S. HUNT,
*Commissioner, Public Service
Commission of Wisconsin.*

"WE should keep in mind, in discussing depreciation, that the function of a depreciation reserve is to pay for capital which is being currently consumed. It is not its function to provide for future capital which may be needed when the present capital is gone. Nobody can predict whether the units of property which are being presently consumed will be replaced by like units costing the same amount as the consumed units

or whether they will be replaced by different units costing more or less than those now in use.

"From the foregoing considerations, it logically follows that units retired should be charged to the depreciation reserve at the amount at which they were originally incorporated in the fixed capital records of the utility. It is difficult to understand how books can be kept in any other way. Depreciation reserves may be kept on this basis as straight-line depreciation or sinking-fund depreciation. Under the proposed system of accounts either system may be used and it is probable that most commissions are now permitting the use of both systems. Personally, I believe that straight-line depreciation is preferable, but, since both systems are permitted in the proposed system of accounts, it is unnecessary to pursue this subject further."

—FRED S. HUNT,
*Commissioner, Public Service
Commission of Wisconsin.*



On Commission Appropriations

"ONE of the boulders in the road named 'Regulation,' is the lack of full judicial appreciation of the fact that the problem of regulation while a legal problem is a complex of social, economic, financial, engineering, statistical, and accounting problems and that therefore the determinations of the administrative agencies, aided as they are continuously by state employees, trained and experienced in the fields of knowledge covering these prob-

lems (aid not available to the courts sitting in review), are entitled to the benefit of a presumption well-nigh approaching a conclusive presumption and to the placing on those who attack such determinations of the burden of establishing error with reasonable conclusiveness."

—FRANK H. SOMMER,
*General Counsel, New Jersey Board
of Public Utility Commissioners.*



On Federal-State Relations

"THE activities of the Federal Communications Commission which are of principal interest to the state commissions are in the telephone field, and they are carried on by that commission through its telephone division, of which Commissioner Walker, formerly chairman of the Oklahoma commission, and likewise formerly chairman of this committee, is chairman.

"The cordial coöperative relations between state commissions and that commission, which were commented upon in the 1935 report of this committee, have continued. However, the attention of the telephone division of the Federal Communications Commission during the past year has been largely engrossed in the general telephone investigation, now being carried on under the direction of a congressional resolution; and no occasion has arisen for the application of the coöperative procedure in any formal rate proceeding before the

commission. The association, however, has coöperated in the defense in court of the Federal Communications Commission's order promulgating a uniform system of accounts. In the preparation of that accounting system, as stated in our 1935 report, our accounting representatives coöperated, and the same was recommended for adoption to the several state commissions exercising jurisdiction over telephone utilities by a resolution adopted at our 1935 Convention. (Proceedings, page 480.)

"The Bell Telephone Companies instituted a judicial review of this order, by an action brought against the United States and the Federal Communications Commission in the United States District Court for the Southern District of New York. The case was heard before a statutory court of three judges in December, 1935. By direction of President Morgan, the association intervened in the suit as a party defendant, and was represented in

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the hearing by our general solicitor. A brief on behalf of the association was also filed through our Washington office.

"The decision of the court, handed down in February of this year, sustained the validity of the accounting order, with minor exceptions which were acquiesced in by the Federal Communications Commission (*American Telephone & Telegraph Co. et al. v. United States et al.* 14 F. Supp. 121). The telephone companies involved have taken an appeal in this suit to the United States Supreme Court, where the case is now pending."

—EXCERPT from the *Report of the Committee on Cooperation between Federal and State Commissions.*

"IT is the opinion of the committee that the satisfactory practice of cooperation under the Federal Power Act (§ 209) will be greatly facilitated by the adoption of a concrete plan, setting forth the manner in which cooperation may be initiated and the procedure which will be followed in formal proceedings which are heard under its provisions.

"Any such plan adopted, your committee believes, should be as simple and as broad in its provisions as it can be made. It should enable either a state commission or the Federal Power Commission easily to suggest cooperation in any proceeding or matter arising under the Federal Power Act, or affecting one

or more public utilities subject to the jurisdiction of one or more state commissions and of the Federal Power Commission; and it should insure to the cooperating commissions, Federal and state, full opportunity to present and jointly consider their respective views concerning the final decision or order to be made in said proceeding.

"The committee believes that the plan prepared as aforesaid and set out below (published in text) contains these essential features, and it accordingly recommends said plan for approval by this association on behalf of its state commission membership."

—EXCERPT from the *Report of the Committee on Cooperation between Federal and State Commissions.*

"IN view of the delays necessarily incident to bringing the Federal (motor carrier) act into full operation throughout the country consideration should be given to the question whether it is advisable for the I.C.C. to clothe certain employees of the state commission with authority to act as enforcement agents for the Federal commission. The state people are in constant touch with local conditions and in many cases would be able to solve interstate problems within their respective states with a great saving in time and expense."

—EXCERPT from *Report of the Committee on Motor Vehicle Transportation.*



On "Objective" Rates

"THE outstanding development of recent years in public utility rate making has been the introduction of selling efforts which have their appeal in what may be termed 'bargain rates.' Customers have been offered 'objective rates,' 'inducement rates,' 'promotional rates,' 'low cost plans,' 'free electricity,' 'half-off plans,' 'share-the-profits plans,' 'service-at-cost plans,' 'full service rates,' 'centennial rates,' and 'additional use rates,' and sliding-scale systems have received renewed attention. Many of these new rate plans are but variants of the original Commonwealth & Southern Objective Rate, although some of them are not so clearly in that category. In every case, however, the common goal is greater consumption per customer. Although these sales campaigns have been undertaken by both the electric and gas utilities, the present report will be confined to a consideration of objective type rates in the electric utility industry which has been more active in this respect.

"In choosing objective type rates as the subject of the accompanying report, the Committee on Public Utility Rates is in a sense continuing the study which it made last year on uniformity of electric rate forms and simpli-

fication of electric rates. Among other things, the present study gives careful attention to objective type rates as a medium for effecting greater uniformity and simplicity in electric rates.

"Under the typical objective rate program it is provided that after two or three years the immediate rate is to be eliminated and all customers are thereafter to be billed under the objective rate. As this is written, however, only a very few companies have made this transition to the single rate, but during the next two and three years, many other companies will have taken this step. It is therefore recommended that in 1937 the Committee on Public Utility Rates report further on results obtained under objective type rates even though it choose some different subject for its main report."

—EXCERPT from *Report of Committee on Public Utility Rates.*

"MANY objective type rate plans, especially the earlier ones, provided that after the lapse of a given period, usually three years, the 'immediate' rate would be eliminated and all customers would be billed under the 'objective' rate whether or not they had earned

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it by increasing consumption. Other plans provide that this step shall be taken whenever a fixed percentage of all customers shall have earned the 'objective' rate or whenever average annual consumption per customer shall have reached a fixed number of kilowatt hours. More recently no provisions have been incorporated in some of the plans for this automatic transition, the change to be effected when conditions warrant the step.

"Obviously, it is essential under any objective type rate plan that customers be shifted over to the 'objective' rate as rapidly as possible. This applies particularly to those plans which have a specified transition date. In an effort to measure the extent to which such shifts had occurred, the tenth question submitted to the companies was: To what extent have your residential customers shifted over to the objective rate? That is, give some measure, such as number of customers or per cent of total customers, now on the objective rate.

"The data submitted in reply to this question show that:

(a) During the first full month of operation under the objective type rate plan from 8 per cent to 46 per cent of customers were billed on the 'objective' rate.

(b) At ten to thirteen months, from 11 per cent to 65 per cent of customers were on the 'objective' rate.

(c) No reports were received for the period between thirteen and twenty-one months, but for twenty-one months to thirty-one months, the percentage of customers ranged from fifty to eighty-five.

(d) In addition to customers being billed on the 'objective' rate, others were receiving some benefits in that they had base bills or were on the 'cross-over' rate, etc."

—EXCERPT from Report of Committee on Public Utility Rates.

"A MUCH sounder basis for an appraisal of objective type rates will be available a few years hence. Nevertheless, the operating experience which the various companies have already had and which they have reported to your committee forms the basis for the conclusions and observations which follow. These points represent the majority opinions. As heretofore noted, there are exceptions in almost every case.

"1. The objective type rate program is not a panacea to be applied indiscriminately.

"2. The first prerequisite is that the management and entire company personnel be enthusiastic in support of the program. Those companies that have had material success with the program were enthusiastic over its prospects from the start, whereas companies that have installed the plan involuntarily as the result of commission action have shown far less successful results. A company's regular rate studies will show what proportion of the customers are small users and might be stimu-

lated by an objective type rate, the extent of saturation of major domestic appliances, the present rate levels, and the availability of competitive or substitute services. That is, if the majority of customers are already using substantial amounts of energy, if appliance saturation is high, if rates are relatively low, or if low cost natural gas is available, an objective type rate will immediately be faced with serious barriers to success.

"3. Under an objective rate program the 'immediate' rate should give some reduction from former rates, and the 'objective' rate should be highly promotional and it should be materially lower than the 'immediate' schedule. Unless such a differential between the two rates exists, much of the inducement value of the plan will be lacking. It follows that in territories where residential electric rates are already comparatively low an objective rate plan is less likely to show outstanding results.

"4. The principal advantages of objective type rates are:

(a) Rates sufficiently low and promotional to stimulate increased consumption by a large number of customers have been made available immediately without incurring comparable losses in revenues.

(b) Companies have been enabled to meet pressure for rate reductions during the depression.

(c) Such results as improved customer relations and greater customer interest have been effected.

(d) Substantial progress toward greater uniformity and simplicity of rate structures has been possible in many cases.

"5. The principal disadvantages of objective type rates are:

(a) Increased complexity of rate structures and greater confusion of the customer during the tenure of the objective rate plan.

Increased billing administration and costs.

(c) Increased costs for the personnel and campaign required to make the plan successful and to avoid or minimize confusion and misunderstanding on the part of customers.

(d) An element of apparent discrimination, which, although it may not constitute unreasonable discrimination, must be carefully handled to avoid unfavorable public relations, and it should be minimized by the use of various limits, etc., hereinabove discussed.

"6. Plans involving the use of objective type rates stimulate the sale of major domestic appliances, such as ranges, refrigerators, and water heaters. Part of the substantial gains in appliance sales reported by the companies could have been effected by an immediate rate reduction, a promotional rate, and an aggressive appliance selling campaign without the use of an objective rate plan, but the latter has, in many cases, been an effective selling point.

"7. Objective type rates increase kilowatt-hour sales and reduce revenue per kilowatt hour. As a result revenue per customer in

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most cases has shown little gain or even some loss during the first several months of the plan. Additional time, possibly two or three years, is frequently required to obtain an increase in revenue per customer.

"8. Objective type rates bring about little, if any, increase in the number of customers."

—EXCERPT from Report of Committee on Public Utility Rates.

"ONE definite risk to the companies is inherent in the objective rate plan. The chance is taken that by the date when the lower 'objective' rate automatically becomes the general rate, a sufficient number of customers will have increased use to the amounts necessary to avoid injurious revenue losses. This situation has lately been recognized by providing that the transition to the lower rate is not to be made automatically on a given date, but rather at such time when average per customer use reaches a stated figure or when the transition can be made on its merits. While such provisions avoid making the transition before revenues can withstand the step, they do not entirely eliminate the element of risk as the company must, in spite of any such reservations, expect at some time to make the 'objective' rate effective for all its customers. If this were not the case it would mean either an abandonment of the objective rate plan with a consequent rate increase for many customers or the continuation of two different rates for the

same service. While this latter condition can be justified as a temporary expedient so that the cost of electrical energy will be ultimately reduced for all customers, it cannot be justified if permitted to continue permanently as it would certainly result in customers having identical loads and service conditions paying different rates for the same energy.

"Finally, we have asked whether objective type rates were a temporary expedient or a lasting contribution to rate making. Sufficient operating experience has not been had to provide a final answer to this question. The plan is still comparatively new and it has been applied only during the recovery phase of a business cycle. Although an answer to the question as to whether equal success would be obtained in a period of general prosperity or a period of declining economic conditions has not been demonstrated and while the rising trend of business activity during the past three years has undoubtedly been a contributing factor in the substantial success which many companies reported for their objective rate plans, your committee believes that concentrated sales efforts with such rate plans as a vehicle account for much of the gains reported. Some of the statements made to your committee held that while objective type rates served well as a temporary expedient they were also a lasting contribution to rate making."

—EXCERPT from Report of Committee on Public Utility Rates.



On Rate Case Expense

"THE costs of rate proceedings incurred by the commissions are in general met by the people subject to taxation.

"The costs incurred by the utilities in such proceedings are met by the ratepayers, since no matter how unwarranted the action of the utility in opposition may be, its costs are required to be permitted to be included in the operating costs for which rates must provide.

"This situation, naturally, gives rise to criticism. It encourages wastefully protracted

contests by utilities.

"Administrators might well put their minds to the problem of letting the costs be borne by the holders of the capital stock of a utility unwarrantedly contesting, and to preventing the shifting of the burden of the costs of such contests to the shoulders of the pavers of the rates."

—FRANK H. SOMMER,
General Counsel, New Jersey Board
of Public Utility Commissioners.



On Reforming the Rate Process

"CANDOR demands the admission that in the field of rate regulation the regulatory process moves haltingly; that it creaks and squeaks, and threatens to break down.

"Frankness requires the admission that here there is ground for just criticism.

"The fault, however, is, in the main, not

that of the administrative agencies. The fault is that of the yardstick which the courts have designed for constitutional measurement of action of such agencies in prescribing just and reasonable rates—a yardstick that has accordion-like qualities.

"That yardstick requires the taking into

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account of book costs, actual costs, cost to reproduce at the time of the inquiry, the property used and useful in rendering service, and 'all other relevant factors.' It is true that the judiciary has declared that no one of these factors has determining weight and that each of them is to be given such weight as the circumstances may require in determining the 'fair value' of such property. One cannot, nevertheless, on a study of the cases reach a conclusion other than that ascertainment of reproduction cost is indispensably essential and that it is the outstanding, and if not 'determining' yet controlling factor. This yardstick which in its application makes it essential that cost to reproduce be ascertained, requiring the inventorying of the units of property and the determining and applying unit prices of these units of property, has proved costly in the extreme and vastly time consuming.

"The accordion-like nature of this yardstick and these consequences of its use have

led a minority of the judiciary to advance 'prudent investment cost' as the measure of a proper rate base. This measure possesses qualities of stability and certainty. It avoids freezing and thawing, contraction and expansion in the basis for rates."

—FRANK H. SOMMER,
*General Counsel, New Jersey Board
of Public Utility Commissioners.*

"I BELIEVE that Federal laws could and should be amended so that commission rate orders cannot be set aside by the courts on constitutional grounds unless the courts hold at the same time that such rates are confiscatory. . . . Such a change in the law would require the courts to recognize the rights of consumers and the regulatory bodies to a decision on the merits of the case before the court."

—CLYDE L. SEAVEY,
*Associate Member, Federal
Power Commission.*



On the Success of Regulation

"NOT long ago the press of the country carried first page stories of a World Congress at which representatives of national departments and bureaus and of local governing bodies declared, and proceeded with discussion on the basis of, the 'abject failure' of regulation through state commissions.

"So far as the press reports show, these declarations went unchallenged. If they aroused resentment in the members of state commissions there present, such resentment remained, apparently, unvoiced.

"I knew that while the high hopes of those who, more than a quarter of a century ago, fought the fight to secure the general enacting of state regulatory commission legislation had fallen short of complete realization, yet that regulation through state commissions was not an 'abject failure,' and that marked progress had been made in accomplishing the purposes

of the legislation. This knowledge raised the question—'Why this silence in the face of attack?' Inquiry disclosed a widespread feeling that the work of regulatory commissions was judicial in nature and that just as tradition requires that members of the judiciary remain silent under attack, so members of these commissions should meet criticism with 'dignified silence.' This feeling rests upon a false premise. Regulatory commissions are not judicial bodies. They are administrative agencies. Their functions are not judicial. Their functions are administrative. As administrative agents it is not only the right of the commissions, but it is their duty as well, to make dignified explanation of action and defend it."

—FRANK H. SOMMER,
*General Counsel, New Jersey Board
of Public Utility Commissioners.*



On Transportation Regulation

"IT is believed that the majority of problems arising under the Motor Carrier Act are sectional rather than national in scope. Employment conditions, wage conditions, operating conditions, requirements of shippers, and competition with other transportation agencies are but a few of the problems which will differ materially in various parts of the country and their treatment must accordingly be different. This is secured by administra-

tion through joint boards and district offices. We believe, however, that even greater authority might be delegated to the various district officials even to the extent of permitting them to determine questions of policy affecting their particular areas. The officials at Washington should continue to handle all matters of national scope and continue to lend their good offices to the attainment of uniformity of regulation among the states. Every state official

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knows from long experience that personal contact between the regulatory body and members of the industry is essential. Many of the regulatory problems are psychological in character and the effectiveness of government regulation depends in large part upon coöperation from the industry. Such coöperation can best be assured by frequent personal and friendly contacts between government officials and members of the industry. Printed rules and regulations, no matter how complete and detailed, cannot substitute for personal contact. It is also hoped that the Interstate Commerce Commission will continue to concentrate many of its activities at the residences of state regulatory bodies."

—EXCERPT from Report of the Committee on Motor Vehicle Transportation.

"UNDOUBTEDLY the entrance of the Federal government into the field of motor transportation regulation is producing a salutary effect upon the industry. Furthermore it is helpful to the state regulatory bodies in that it brings under regulation a large number of operators who were not subject to state jurisdiction and demoralized intrastate regulation of their competitors. At the same time we cannot be blind to the fact that some operators are taking advantage of the necessary delay in the enforcement of the Federal act and are reaping pecuniary profits from their illegal conduct. Participation in illegal operations is not confined to large operators. Indeed the I.C.C. will find, no doubt, that the worst offenders and those who will do the most to demoralize regulation will be the hundreds of small operators who do not, or will not, take the trouble to become acquainted with the laws and regulations. These operators have always caused the state commissions the most trouble and we believe that the mere entrance of the Federal government into the field will not produce any magical changes in the intelligence of consciences of such operators."

—EXCERPT from Report of the Committee on Motor Vehicle Transportation.

"THE recurring receiverships of a number of our largest railroads is a matter of vital concern to the nation. From the time of the first reorganization to the present, there have occurred many breakdowns in the financial structures of American railroads. It has been estimated that since 1870 there have been more than 1,000 railroad receiverships, the average duration of which has increased gradually from approximately two and one-half years to more than four years. Whether caused by excessive competition, unprofitable expansion, over-capitalization, under-maintenance, unfortunate investments, fraud, internal dissension, or decrease of earnings, the re-

sultant loss to thousands of investors, and damage to communities and territories dependent upon those roads, have been enormous. The magnitude of this question becomes evident when it is realized that from 1915 to 1935 there were 31 Class I railroads reorganized through court procedure. These roads owned 37,187 miles of line and had total stated assets of over \$3,400,000,000, with a total capitalization of \$3,071,338,142. Today there are 90 railroads, owning 64,981 miles of road, and having a total capitalization of \$5,265,196,705 in receivership or undergoing reorganization under § 77 of the Federal Bankruptcy Act. This is 26.5 per cent of the total mileage and 22.4 per cent of the total capitalization of all of our railroads."

—CHARLES D. MAHAFFIE,
Chairman, Interstate
Commerce Commission.

"BRIEFLY summarized, § 77 (Federal Bankruptcy Act) as originally enacted, provided that a railroad company might file in the Federal district in which its principal operating or executive offices were located, a petition stating it was insolvent or unable to meet its debts as they matured, and that it desired to effect a reorganization. The judge, if satisfied that the petition complied with the section and was filed in good faith, thereupon approved the petition. In his discretion he could appoint immediately a temporary trustee from a panel designated by the commission. After hearing, a permanent trustee was appointed. A copy of the petition filed with the court also must have been filed with the commission. Thereafter, upon due notice, a public hearing was to be held by the commission at which a plan of reorganization might be presented by the railroad company, by the trustee, and by or on behalf of any group constituting not less than 10 per cent in amount of any class of creditors or stockholders of the company. After the hearing, the commission was required to make a report incorporating a recommended plan, which might differ from any of those filed. That plan, together with the report, then was to be submitted to the stockholders and creditors of the debtor for their acceptance or rejection. The submitted plan, provided it was accepted by two thirds in amount of each class of creditors and stockholders, then was to be certified by the commission to the court. The court, after hearing, was required to confirm the plan or, if refusing to do so, to file an opinion stating its reasons therefor. If the plan was confirmed, provisions were made for its consummation. Thereafter the debtor was discharged of its debts except as provided in the plan."

—CHARLES D. MAHAFFIE,
Chairman, Interstate
Commerce Commission.

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On Valuation Reforms

"THE recipe for rate fixing which the courts have given is one with ingredients which will not jell. I am convinced that the adoption of 'prudent investment cost' as the measure of the rate base would serve the interests of utility users and conserve all legitimate interests of investors.

"The judicial rejection of 'prudent investment cost' and the judicial disapproval of the attempted use, as a short cut, of indices of average prices, give impetus to the movement for legislative authorization to put into effect by agreement sliding scales of rates. Where such authorization is granted the problem is not automatically solved, for so long as judicial position continues unaltered as to the necessary use of the yardstick of 'cost to reproduce' in rate proceedings, the existence of that yardstick will serve to confuse and bedevil the course of negotiations in fixing the rate base which is to constitute the foundation of the sliding scale."

—FRANK H. SOMMER,
General Counsel, New Jersey Board
of Public Utility Commissioners.

"THE greater interest centers this year in court decisions in litigation centering on valuation issues.

"The two decisions of outstanding interest, though they do not carry the authority of our highest court are those of the New York Court of Appeals of July 8, 1936, in *Bronx Gas & Electric Co. v. Maltbie*, and *Yonkers Electric Light & Power Co. v. Maltbie*, 14 P.U.R. (N.S.) 337, upholding orders of the New York commission, made under the state's temporary rate statute. This statute, it will be recalled, provides for fixing of temporary rates, furnishing a return of not less than 5 per cent on original cost, less accrued depreciation, pending final decision of, and promulgation of permanent rates in, a rate proceeding. It expressly authorizes the commission in prescribing permanent rates to consider the effect of the temporary rates. The appellate division of the supreme court (244 App. Div. 475, 8 P.U.R. (N.S.) 474; 245 App. Div. 419, 12 P.U.R. (N.S.) 26), by a vote of 3 to 2, had invalidated orders of the commission issued under § 114 of this statute, holding that the validity of temporary rates must be tested by the same considerations as permanent rates and that the burden of curing inadequate temporary rates could not lawfully be imposed upon later and different consumers through liberal permanent rates. The court of appeals now reverses these decisions and, by a vote of 6 to 1, sustains the orders. It construes the act as compelling the commission, in case temporary rates prove to have been inadequate, to make up the loss to the utility in the permanent rates, and thus construed, the court holds the act not unconstitutional.

"The court of appeals distinguishes between a temporary and a final rate. It held that the factors—original cost less accrued depreciation—provided by the statute to be considered by the commission in fixing a temporary rate are not all the factors which must be taken into consideration in fixing finally a fair return or rate, or any rate which has the effect of being final; that it is apparent and conceded that if this temporary rate is to be final, or has any element of finality, it is unconstitutional and void.

"That the consumers who benefit by inadequate temporary rates may not be wholly identical with those who later made up the loss, the court considers of minor importance, saying 'when we speak of the consumers—the customers—we mean the business, not individuals.'"

—EXCERPT from the Report of the
Committee on Valuation.

"ADHERENCE to the Supreme Court's rule for determining value, laid down in *Smyth v. Ames* (1898) 169 U. S. 466, 42 L. ed. 819, and to its decision in *West v. Chesapeake & P. Teleph. Co.* (1935) 295 U. S. 662, 8 P.U.R. (N.S.) 433, has been noted in various lower court decisions during the year. In the *Conowingo Power Case* an order by the Maryland commission (10 P.U.R. (N.S.) 353) was enjoined in a decision filed by the state court, December 20, 1935. No opinion accompanied the decision, but the court apparently rejected the order because of the use of price indices with the defects of those employed and condemned in the *West Case*. In its *Southern Bell Telephone Case*, the Louisiana commission was enjoined by the state court from enforcing an order reducing rates on the ground that the valuation, based on price indices to the exclusion of other relevant facts, was in violation of due process. In California the Federal District Court (13 F. Supp. 931, 13 P.U.R. (N.S.) 520) enjoined a rate order of the railroad commission holding that due process had been denied in that in fixing rates the commission had relied solely on historical cost though evidence as to reproduction cost was offered. The courts are demanding that due process be not curtailed; that valuation be determined by consideration of all relative matters of record giving to each its appropriate weight; and continue to criticize the use of price indices unless shown to be applicable to, and representative of, price changes in the particular kind of property under consideration."

—EXCERPT from the Report of the
Committee on Valuation.

"UNDER original cost as used by the California Railroad Commission as the basis for rate valuation, utilities operating in

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that state have prospered for many years. . . . They have been able to finance easily and adequately, have operated on low rates to consumers, have built strong reserves, and have given good service. During all that period, with the exception of two or three instances, the California utilities have acquiesced in the historical cost method; they would not have done so if their properties were being confiscated."

—CLYDE L. SEAVEY,
*Associate Member, Federal
Power Commission.*

"THE Supreme Court's insistence on the use of reproduction cost as a method of valuing a utility property made valuation too costly for most regulatory bodies.

"We all want to simplify regulation, reduce its cost, and make rate adjustment effective as speedily as possible. Experience shows us none of these objectives can be assured if we must follow the legislative standards that appear now to be required by the Supreme Court.

"That court has determined that a fair return to the utility must be based on the fair value of the property. But it has indicated that the predominant criterion of determining fair value is the 'reproduction cost, new.' This makes the determination of fair value extremely costly and beyond the means of most regulatory bodies to carry forward in any adequate way. It also requires a long time, while regulation, to be of proper value, must be comparatively immediate and certain. . . .

"The use of historical, or original, cost is the more accurate method, and it not only represents definitely the investment in the property but is simple, inexpensive, and expeditious."

—CLYDE L. SEAVEY,
*Associate Member, Federal
Power Commission.*

"THE recording of original cost will tend to disclose write-ups where they occur.

"If the original owner of a utility plant who had built it up from the beginning were to suddenly decide that his fixed capital was on his books at too low a figure and should conclude to write it up 50 per cent, increasing his rates accordingly, he would have trouble with

whatever regulatory agency had supervision over his rates. He could not raise his rates by the simple device of altering his fixed capital records.

"It naturally follows that what could not be done directly should not be done by the equally simple device of transferring the title of his property to another.

"Transfer of title does not increase or diminish the value of fixed capital. If the purchaser of utility property pays more for the same than its book cost as shown by the books of his vendor, or pays more than the original cost of such property and thinks that the fair value of the property is higher than these costs, he may apply to the commission having jurisdiction, which will then conduct a hearing at which the fair value of the property will be determined. He should not, however, be permitted to alter his rate base merely because he has paid a certain price for the property. Both the original cost and the purchase price are facts which should be recorded on the books.

"The use of original cost will result in greater uniformity of plant records than exist at the present time. Utilities today have property recorded in the detailed prescribed accounts at the original cost, the reproduction cost, and the cost to the company. It appears that some have another kind of cost recorded in their accounts. Recently, in connection with a formal case, one of our utilities presented exhibits setting forth its property on the basis of what it terms 'Cost to the Company.' This did not agree with the accounts at all, due to the fact that the company went back for twenty or more years and added additional amounts to its property account, claiming that in the early period articles which should have been considered as overheads on construction had been charged to operating expenses, but that nevertheless they should have been included as a part of its investment in the property. The original cost principle of plant accounting prevents the inclusion in physical property accounts of going value, water-power value, and other intangibles which might not be so favorably labeled."

—FRED S. HUNT,
*Commissioner, Public Service
Commission of Wisconsin.*

Notes on Recent Publications

A POLITICIAN UNAFRAID. George W. Norris, Senator from Nebraska. By Richard Neuberger. *Harpers Magazine*. October, 1936. (Article, among other things, states Mr. Norris' position on power issue.)

IS IT SAFE TO FLY? By Marquis W. Childs. *Harpers Magazine*. October, 1936. (Plea for regulation of air transport industry.)

THE PATH TO PROSPERITY. By Gilbert M. Tucker. Price \$2.50.

This book presents a discussion of some angles of the taxation of chain stores which merit attention. The book is by an impartial and disinterested student of taxation, who holds no brief for chain stores. He advances argument for justice, with no discrimination for or against any group.

The March of Events

State Commissioners Convention

THE Forty-eighth Annual Convention of the National Association of Railroad and Utilities Commissioners assembled on November 10th in Atlantic City, N. J. Following preliminary addresses of welcome and responses thereto, participated in by Governor Harold G. Hoffman of New Jersey, Mayor Charles D. White of Atlantic City, Harry Bacharach, president of the New Jersey commission, Frank P. Morgan of Alabama, and Thomas E. McKay of Utah, past president and present president, respectively, of the association, the state commissioners listened to a review of the work of the association for the past year by the association's solicitor, John E. Benton of Washington, D. C., and then settled right down to the serious work of the convention.

The afternoon of the first day was devoted to an address by Dean Frank H. Sommer of the New York University Law School, who deplored accusations made about the future of commission regulation and advocated certain regulatory reforms, including the requirement that rate case expense should be charged to earnings instead of the operating expenses of litigating utilities. The topic for the session was the proposed revised uniform system of accounts for electric utilities and bus carriers. The report of the executive committee on statistics was given by E. W. Morehouse of the research division of the Wisconsin commission. Commissioners Fred S. Hunt of Wisconsin, Francis J. Duchelle of Connecticut, Charles C. Drummond of Virginia, and F. H. Lee of Alabama participated in the ensuing discussions on accounting matters.

By resolution, the association admitted members of the Federal Securities and Exchange Commission.

The morning session of the second day, Chairman Charles D. Mahaffie of the Interstate Commerce Commission made a personal address describing the steps taken by his commission to reorganize the 44 railroads placed under its jurisdiction by Congress. Commissioners William M. Smith of Michigan, M. J. Foley of Wyoming, Frank W. Matson of Minnesota, Andrew Olson of Illinois, and Director John L. Rogers of the Bureau of Motor Carriers of the Interstate Commerce Commission, joined the discussion which developed on transportation matters in general. This discussion occupied also the afternoon session of the second day, at which time the

report of the committee on motor vehicle transportation was presented by Ferd J. Schaaf of Washington, and the report of the committee on railroad grade crossing elimination was made by Commissioner C. W. McDonnell of North Dakota.

The high light of the third day's session, which was given over in the morning to the discussion of electric utilities, and in the afternoon to commission regulation in general, was the spirited discussion led by Federal Power Commissioner Clyde L. Seavey, who was formerly a member of the California Railroad Commission. He declared that the Supreme Court's insistence in using reproduction cost as a method of valuing utility properties made valuation too costly for most regulatory bodies. Commissioner Seavey urged the use of historical or original cost, not only as a more accurate method, but a simpler and less expensive one to use.

The report of the committee on valuation made at the same session at which Mr. Seavey spoke, quoted a minority opinion by Supreme Court Justice Brandeis on the St. Joseph Stock Yards Case, to the effect that regulation cannot be effective unless the legality of rates prescribed can be determined with reasonable promptness. The committee stressed the importance of the Bronx Gas and Electric Case in which the New York Court of Appeals recently upheld a New York statute authorizing the commission of that state to fix rates temporarily pending the outcome of more extended deliberation.

Another committee report read at this session was that of the committee on utility rates under the chairmanship of James M. Slattery of Illinois. This report discussed at length the "objective type" of rates now being tried in various parts of the country.

During the afternoon session of the third day there was presented a report of the special committee on the progress of public utility regulation under the chairmanship of Paul J. Raver of the research division of the Illinois commission. This report listed the savings to consumers through commission regulation in the states during the last three years as \$177,798,059. Of this total \$96,199,277 was in electric rates and \$24,479,943 in gas rates.

At a dinner of the association following the sessions of the third day, former Governor Edward Stokes of New Jersey defended utility and railroad management as "the most misrepresented and abused groups in public life except the bankers." He declared that that government prospers most which leaves unfettered the business and industrial actions of the people.

PUBLIC UTILITIES FORTNIGHTLY

The final day of the convention was given over chiefly to the discussion of regulation of telephone companies. The subject was divided into three parts: (1) "The Conduct of a Telephone Rate Case," presided over by Chairman Perry McCart of the Indiana commission, assisted by Wade O. Martin, chairman of the Louisiana commission; (2) "What Action, If Any, Should the Federal Communications Commission Take with Respect to Depreciation?" presided over by E. J. Hopple, chairman of the Ohio commission, assisted by Commissioner William H. Barry of New Hampshire; (3) "What Classes of Telephone Companies Are Subject to the Jurisdiction of the Federal Communications Commission?" presided over by C. J. Goodnough, chairman of the Pennsylvania commission, assisted by Commissioner Floyd L. Bollen of Nebraska.

Among other committee reports filed during the sessions was the report of the committee on cooperation between Federal and state commissions and the report of the committee on safety of operations.

Thomas E. McKay, member of the Utah Public Service Commission, was reelected president of the organization. Alexander M. Mahood of West Virginia was reelected first vice president, and Nelson Lee Smith of New Hampshire second vice president. Clyde S. Bailey of Washington was reappointed secretary. Mr. Bailey will continue his duties as assistant solicitor general of the association. The 1937 convention of the association will be held in Salt Lake City, Utah.

Loans Fight to High Court

THE battle between the administration and power companies reached the Supreme Court on November 10th in arguments over validity of PWA loans and grants to municipalities for the establishment of publicly owned power plants and distributing systems. The suit of the Duke Power Company to block such loans was expected to provide a vital test of the administration's program for cheaper electricity. Many loans and grants were being held up pending court decision.

The Duke Company, which has a franchise to furnish light and power in Greenwood county, South Carolina, brought suit to enjoin PWA Administrator Ickes and Greenwood county from going through with an agreement whereby PWA funds would be advanced for construction of a \$2,852,000 hydroelectric power plant at Buzzard Roost on the Saluda river. The company charged the loan and grant was a part of a policy of coercion of private utilities to compel them to reduce their rates.

The controversy was expected to hinge on whether the government is invading the rights of the state in assisting municipalities and other political subdivisions in establishment of publicly owned power and light systems.

Bell Liberalizes Pension Plan

THE Bell system comprising the parent company, American Telephone and Telegraph Company, Western Electric Company, and 24 operating companies with affiliates, last month notified the 270,000 employees involved that while complying with the provisions of the Social Security Act, the system would maintain the company-financed retirement plan. Liberalization of the present plan was indicated with the statement that should the Social Security Act remain in force until 1942, employees would receive full benefit of the company plan and one half of the Federal government pension.

The original plan provided that any government pension would be deducted from the amount due under the privately financed plan. Bell system maintains the largest pension plan of any private organization, with pension fund approximating \$195,000,000.

See Television Show

NEW York's first television performance of a complete program planned for entertainment value as well as a demonstration of progress in the art of telecasting was flashed across Manhattan on November 6th. The show, staged in the television studio of the National Broadcasting Company at Radio City, was broadcast from the 10-kilowatt 6-meter transmitter atop the Empire State building.

More than 200 guests watched the performance in a "theater" room on the 62nd floor of the skyscraper in Rockefeller Center. They saw the show as reproduced by fifteen of the latest television receivers lined up in a darkened room, the walls of which were draped in black. The greenish-hued pictures measured 7½ by 12 inches.

Raps Traffic Industry

HAROLD G. Moulton, president of the Brookings Institution, a privately endowed research organization, last month said that the transportation industry "is not performing its service effectively and is tending to impede rather than promote rapid economic progress." This situation, he added, speaking before a joint dinner of the Association of American Railroads and the Railway Business Association in New York, has resulted from "confused and uncoordinated policies" leading to creation of excessive transportation facilities.

He said an effort should be made to solve transportation problems under a system of private ownership and operation. He also stated that there did not appear to be any good reason for believing that government ownership and operation would eliminate present "basic problems."

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Arizona

Pays Part of Taxes

THE Phoenix board of supervisors and the Central Arizona Light and Power Company entered into a stipulation recently whereby the utility would pay \$106,692.12 in current state and county taxes. The company has a suit pending in Federal court charging the full current tax assessment on its properties is illegal and that the full assessment should be only \$213,384.24.

Under the stipulation, the utility is to pay the first half instalment of what it concedes to be due the county, the county accepting that sum with the understanding it will waive no rights in the court action.

Sets Date for Rate Investigation Hearing

HEARING on the state corporation commission's investigation of rates charged by the Tucson Gas, Electric Light and Power Company will be held by the commission in Tucson on December 7th, according to recent reports.

The hearing was originally scheduled for late in October, but was postponed at request of the Tucson Merchants Association and Tucson city officials for the purpose of allowing further study of the reports made by the rate engineers.

California

Refuses Power System Sale

W. C. MULLENDORF, vice president of the Southern California Edison Company, on October 31st announced his company would not sell the electric distribution system to Tulare. The official said the company was, in effect, a cooperative community institution owned by the public, and that it was not in the interest of its patrons to sell the system to the city.

Study Power Plan

SITTING as a committee of the whole, the San Francisco board of supervisors on November 5th began a study of plan seven, a \$43,000,000 scheme for purchase by the city of the local Pacific Gas and Electric system for distribution of Hetch Hetchy hydroelectric power.

In recommending the plan, Utilities Manager E. G. Cahill told the board that it would pay all operation, maintenance, and interest on outstanding bonds on the power distribution system, and would then pay off and retire bonds in the amount of \$1,748,000 a year. He said it would also pay into the depreciation reserve fund \$1,260,000 a year.

After all that, he said, it would produce a surplus revenue of more than \$4,000,000 per year, and in addition reduce power rates to San Francisco consumers \$1,721,000 a year.

Plans Lighting Payment

PAYMENT by the city of Los Angeles of half the entire ornamental street lighting bill in the city, which totals \$1,500,000, according to the street lighting engineer was planned for 1937-38 by the city council which adopted

such a recommendation by its finance committee recently.

The plan, however, was reported contingent on the adoption at the proposed December 8th special election of the amendment providing for acquisition by the department of water and power of the Los Angeles Gas and Electric Corporation's electric system and granting 35-year franchises to the gas companies.

Under the agreement between the city and the company's settlement of gas franchise suits by adoption of the amendment would mean a payment of \$505,000 to the city for past use of streets for gas services.

Files Rate Schedule

THE Pacific Telephone and Telegraph Company on October 30th filed reduced long-distance rate schedules with the state railroad commission, affecting intrastate rates. N. R. Powley, president of the company, said the reduced intrastate rates and other reductions on interstate rates, to be filed with the Federal Communications Commission, would save the company's customers about \$550,000 a year.

In the new set-up night tolls bear a lower rate from 7 P. M. to 4:30 A. M. daily and all day Sunday. This substituted a two-charge, or day and night toll schedules, for the 3-rate system, with day, evening, and night tolls.

Voluntarily Reduces Rates

VOLUNTARY rate reductions by the San Diego Consolidated Gas and Electric Company totaling \$120,396 a year were approved recently by the state railroad commission, effective November 16th. Commercial lighting

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was the chief classification affected, although private consumers also were expected to benefit in gas and electric bills. It was estimated general service gas rates would be reduced \$20,578 a year.

The reduction in commercial lighting in the cities of San Diego, Chula Vista, Coronado, El Cajon, Escondido, La Mesa, National City, Oceanside, and San Clemente amounted to ap-

proximately \$57,655. Commercial lighting in other unincorporated territory was reduced \$3,735.

General residential electric service for incorporated cities was reduced \$30,762, and for the unincorporated territories approximately \$3,550.

Other small reductions in special classifications were said to amount to \$3,106.

Florida

City Loses Phone Fight

MIAMI on November 5th lost its fight against an injunction obtained by a reputed racing information bookie service operator, which prevented city police from seizing telephones in his establishment. Circuit Judge Jefferson B. Browne handed down a decision sustaining the operator's temporary injunction at Key West, it was reported.

City Solicitor Abe Aronovitz, upon being informed of the ruling, declared that the case would be appealed to the state supreme court.

Judge Browne ruled a telephone is not a gambling device, that the operator was not under arrest charged with violating any municipal ordinance, that the city's contention it wants to seize telephones to use as evidence in some subsequent case was untenable, and that even if a criminal case were pending against the operator, the presence of telephones would not be necessary or even helpful in support

of testimony they were being used to receive racing information for bookmakers.

To Appeal Rate Case

THE Florida Power and Light Company in a formal statement by Will M. Preston, acting head of the company's legal department and attorney of record in the rate case, recently announced it would appeal from the decision of Federal Judge William H. Barrett, dismissing the company's Miami electric rate injunction suit. Mr. Preston after reading the court's decision said the company had no alternative but to appeal the case.

The company's decision to appeal held up payment of more than \$2,000,000 held in escrow by the company for rebates should the city win the case. Sidney S. Hoehl, special attorney for the city, said he believed the court's decision was sound in every respect and that there was no danger of its being reversed on appeal.

Illinois

Power Users Sue Utility

FIFTY-EIGHT large users of power in Chicago recently brought suit against the Commonwealth Edison Company for \$8,000,000. Filed in superior court, the bill sought the return of \$6,000,000 in alleged overcharges and \$2,000,000 in damages "for the sake of example and punishment." The complainants included industrial firms, hotels, and laundries.

It was asserted that the Edison Company "buried" a charge of 1½ mills per kilowatt hour as a lamp service charge on power bills, when the fact was they use no lamps on their power circuits. It was alleged that light bulbs were used on a separate circuit, and that no lamp service charge was made because the companies furnish their own bulbs.

Attorney Shepard Andelman, who filed the bill, said negotiations had been in progress for four years but that the complainants had "gotten nowhere." He said the companies were

forced to pay the bills presented or have their electric service cut off.

The alleged overcharge of \$6,000,000, which the complainants seek to recover, covers only the period since October 30, 1931. Although the overcharges were said to extend back to 1924, the earlier years were outlawed by the 5-year statute of limitations.

Voids Tax on "Industrial" Phones

THE Illinois Supreme Court recently ruled that the Illinois Bell Telephone Company need not pay the state 3 per cent public utilities tax on revenues derived from its "industrial" business, but like utilities furnishing electric, gas, and water service, was required to pay only on its commercial and domestic revenues.

The court reversed a decree of the Sanga-

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A Stay of a Stay of a Stay

THE first district of the appellate court on November 7th issued a writ of superseas blocking the 16 per cent rate increase, affecting 800,000 Chicago consumers, put into effect October 24th by the Peoples Gas Light and Coke Company throughout its operating territory.

The writ, issued by Justices David F. Matchett, William H. McCurely, and John M. O'Connor, stayed at once an injunction issued October 23rd by Circuit Judge Stanley H. Klarkowski which restrained the Illinois Commerce Commission from interfering with the rate increase.

Indiana

Announces REA Grant

THE Rural Electrification Administration recently announced that \$200,000 had been granted to the utilities district of western Indiana (Bloomfield), to build about 200 miles of line to serve 1,579 customers in Greene, Martin, Owens, Clay, and Sullivan counties.

To Buy RA Units

TRANSFER of the Decatur homestead project from government to private ownership

was announced by the Indianapolis regional offices of the Resettlement Administration on November 5th. The Decatur project was said to be the first of three such projects in that region to be transferred to private ownership.

Under the direction of the newly organized Decatur Homesteads Association, occupants of the 48 homes which comprise the project have worked out a system enabling them to buy their own homes, it was believed. Monthly payments will average about \$30.67 over a period of forty years for each of the forty-eight families in the project. No down payment is required.

Kentucky

Files Tax Suit

A SUIT for approximately \$25,000 for taxes for the last five years was filed November 6th in the county clerk's office by the city of Bowling Green through Mayor B. S. Rutherford against the Kentucky-Tennessee Light & Power Company.

The plaintiff charged "property having a cash value of \$1,320,000 was wholly omitted from assessment for franchise taxation due to the failure of the defendant to disclose and make a true and accurate report of the amounts charged to depreciation in reports filed with the auditor of public accounts."

Towns Confer on TVA

THIRTY-FOUR officials of twelve Kentucky cities conferred with Tennessee Valley Authority officials at Knoxville recently on the possibility of getting TVA power in Kentucky. Roy H. Owsley, field consultant of the Kentucky Municipal League, said that TVA

officials had said that practically the entire state of Kentucky was within an area which possibly could be served by TVA.

Seven Kentucky towns, Middlesboro, Glasgow, Williamstown, Wilmore, Grayson, Louisa, and Scottsville, voted on November 3rd on the question of issuing revenue bonds for municipal power plants. The principal objective of the trip to Knoxville was said to be an effort to find out if the cities would be able to get TVA power in case bonds were voted, or whether they would have to build their own distribution systems. The delegation was headed by Mayor Neville Miller of Louisville, president of the Kentucky Municipal League.

Election returns showed that five of the seven towns voting favored municipal utility plants, two rejecting proposals for bond issues. Middlesboro authorized a \$175,000 bond issue for a distributing system to use TVA power; Glasgow voted 1,002 to 798 to authorize issuance of \$200,000 in revenue bonds for construction of an electric power plant. The Kentucky Utilities Company fran-

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chise expired November 26th; Williamstown endorsed, 522 to 50, a proposal to construct a municipal power plant to serve the city and sections of Grant county.

Wilmore turned down, 292 to 126, a proposal to issue revenue bonds of \$75,000 for a municipal power plant. Louisa rejected proposals for power and water plants.

Massachusetts

Reduces Electric Rates

HOUSEHOLDERS who use more than 200 kilowatt hours of electricity received a reduction of one-half cent per kilowatt hour, according to a rate schedule recently filed

with the state department of public utilities by the Reading municipal light department. The reduction, which became effective November 2nd, also included domestic customers in Wilmington and Lynnfield Center, it is reported.

Minnesota

Get REA Funds

Two Minnesota rural electrification projects were allotted \$415,000 by the Federal government recently, according to press reports.

The Crow Wing Coöperative Power and

Light Company at Brainerd received \$240,000 to build about 210 miles of line to serve 650 customers in Crow Wing and Morrison counties. The Freeborn Coöperative Light and Power Company at Albert Lea was granted \$175,000 to build 179 miles of line serving 502 customers in Mower and Freeborn counties.

Nebraska

Must Match PWA Gift

DR. G. M. Welch, president of the McCook public power district recently stated that approval at an election of a franchise from the city for construction of a light plant would be necessary before a \$101,300 PWA grant, announced in Washington, would be available to help finance the project.

The city, he said, would be required to supplement the grant with about \$360,000 to

be obtained from a bonding company and which would be paid off with income from the light plant. Dr. Welch said no taxes would be levied on bonds issued against the city. The rates charged to the consumers would be just enough to retire the bonds and pay the running expenses of the plant.

The district had asked for \$143,000. Dr. Welch said, "but the grant of \$101,300 will be accepted." It is a direct grant or gift to the city.

New York

Votes Check on Mergers

PUBLIC utility companies desiring to consolidate their operating units will be required to make an affirmative showing that the proposed mergers will not handicap public regulation, the state public service commission announced November 11th.

In a statement approved by unanimous vote of Chairman Milo R. Maltbie and Commissioners Brewster, Burritt, Lunn, and Van Namee, the commission prescribed a set of rules with which such companies must comply if they expect favorable action on pending mer-

ger applications. The action, the statement said, was induced by the submission of several merger plans involving such groups as the Consolidated Edison Company System, the Niagara Hudson Power System, and the Associated Gas and Electric Company system.

Commending the avowed purpose of the utilities to simplify corporate structures, and thus effect economies to be passed on to consumers, the commission nevertheless voiced its belief that the fundamental question was whether "the companies or systems resulting from mergers will facilitate or hinder effective regulation."

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North Carolina

Files Rate Reduction

RATE reductions to effect an annual saving to users of \$1,100,000 in the two Carolinas were filed by the Duke Power Company with the state public utilities commission recently, effective November 1st. It was estimated that North Carolina customers would save \$733,000 a year as a result of the reduction.

The second reduction in Duke rates since May 1, 1935, came as a result of negotiations between Commissioner Stanley Winborne and utility officials following profits made by increasing business.

The latest reduction was also said to be the result of reduced costs effected by the merging of the Duke Power Company and its subsidiary, the Southern Public Utilities Company.

Ohio

Power Project Idle

THE more than 400 miles of transmission lines erected in the half-million-dollar Champaign county rural electrification project were reported standing idle last month pending decision by the Federal REA on the source of power to supply the local project, according to officials.

Construction work was said to be complete with the exception of approximately 60 miles of "lanes." It was planned to send the current over the lines two months ago.

it intended to increase the rate of 20,000 consumers of the old Federal Company and the city filed a protest with the state public utilities commission. The gas company then filed injunction proceedings to prevent the city from interfering with the proposed increase.

County Judge Robert P. Duncan in his decision sustaining a demurrer of the city to the gas company's petition, held, in substance, that an application for a temporary restraining order had to be preliminary to some action which the court might eventually take, and that there was no legal authority for such a restraining order in the petition in which the gas company found itself.

Denies Injunction Plea

THE Ohio Fuel Gas Company on November 2nd lost its injunction proceeding to prevent the city of Columbus from taking any action to prevent it from increasing the gas rate to customers of the old Federal Gas and Fuel Company from 48 cents to 55 cents per thousand cubic feet.

The Ohio Company, as successor to the Federal Company, gave notice to the city that

Offers Free Electricity

A "CHRISTMAS gift" dividend of three months' free electricity was promised all customers of the municipal electric light plant of Martins Ferry on November 9th. Free current was the only way the city council could see to dispose of \$250,000 profit from the light and water plants, according to recent press reports.

Oklahoma

Phone Rates Cut

TELEPHONE rates of the Southwestern Bell Telephone Company in Oklahoma City were cut \$120,774 a year by the state corporation commission on November 4th. The company, which plans an appeal, must post bond with the state supreme court to provide rebates to subscribers in event the commission order is sustained.

Jack Walton, member of the commission,

said he believed the company was entitled to get enough return in profitable cities to compensate partly for "the losses it is sustaining in more than 100 cities in the state." Commissioner Walton did not participate in issuance of the order.

The new rates, which were effective on the company's next monthly billing, are as follows: one-party business \$7; one-party residence \$3; two-party residence \$2.25; four-party residence \$2; hand-set differential 15 cents.

Pennsylvania

Plant Wins Third Time

FLEETWOOD approved a municipal power plant proposal in a vote held on November 3rd. On two previous occasions Fleetwood voters registered their approval of the project at special elections. Each time, however, the borough was prevented from going ahead with the plans through taxpayers' suits which resulted in the elections being declared void on technical points.

Bus Compromise Proposal

A 15-CENT bus fare was the Pittsburgh Motor Coach Company's long-awaited compromise bus fare proposal presented to the city on November 9th. The company proposed: (1) reduction of minimum fare on "all regular 25-cent routes" to 15 cents; (2) seven tickets for \$1; (3) fifteen tickets for \$2; (4) offer to operate the motor coach company by the Pittsburgh Railways Company; (5) announcement of a new traction agreement to submit to the city council.

If accepted the agreement would mean that Pittsburgh bus riders will receive more than a 10-cent reduction on each ride, provided they purchase tickets in blocks of 7 or 15, it was said. The bus company prefaced its compromise offer, presented at a meeting of the city council, Mayor Scully and Public Service Commissioner Thomas C. Buchanan, with the following statement:

"We believe a continuance of the pending bus litigation which might be drawn out through appeals to the courts for a number of years, will delay the solution of this broad transportation problem and that in the end the result will not be satisfactory either to the public or to ourselves."

Commission Accepts Governor's Plan

THE state public service commission on November 9th withdrew its representative

from meetings of the Pennsylvania Joint Committee on Rural Electrification. The action was taken in compliance with the request of Governor Earle, the commission said in a statement.

The governor contended recently that the joint committee was in the control of the electric power and light companies, whose representatives served with representatives of agricultural organizations. The commission in the past has been represented at these meetings by a commissioner who did not vote and attended only as an observer. His function was to advise the commission of differences between the two groups and of the progress being made in rural electrification.

The commission said it would continue to cooperate with any rural group or individual interested in the extension of rural electrification or in better service and lower rates, and would welcome advice or suggestions from the representatives of any farm group or any individual living in rural territory whether or not they happen to be representatives of the farm group on the joint committee.

Refuses to Make New Offer

THE Edison Light and Power Company last month told the state public service commission that it could not submit another voluntary rate reduction offer "at the present time." The commission already had rejected two offers to reduce the rates, contending the utility would still be making 8 per cent. The commission several years ago fixed 6 per cent as a "fair return."

Commissioner Stahlnecker asked for an "amicable agreement" to eliminate long hearings and save money for the company, the consumers, and the commonwealth. S. G. Miller, assistant counsel for the state commission, contended that despite previous reductions totaling \$178,000 a year, the company continues to make more than 6 per cent on its investment, and sought to prove that the utility's income jumped by 12 per cent in the first six months of this year alone.

South Carolina

Grants Request

THE state public service commission last month authorized the Duke Power Company to supply electricity to Antreville and surrounding territory in Abbeville county.

The action followed a hearing at which the Duke Company applied for a certificate formerly held by the Abbeville Light and Power

Company. The Abbeville firm relinquished the certificate with a proviso that it would not affect its right to complete a dam at Rocky river and furnish Abbeville electricity.

Natural Gas Conference

OFFICIALS of six South Carolina towns were invited to attend the natural gas confer-

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ence which was held in Columbia on November 12th. Towns invited to send representatives to the conference were: Johnston, Edgefield, Trenton, Ward, Ridge Spring, and Monetta.

Representatives from several Georgia cities

and towns were also expected to attend, it is reported.

There are no natural gas fields near Columbia but Mayor L. B. Owens hoped that a plan could be worked out to pipe gas to the city and various communities interested.

Tennessee

Upholds Utilities' Right

THE disputed right of 19 southern power companies to make a mass attack on the whole Tennessee Valley Authority power program won approval of Federal district court on November 7th. Acting in a case brought by the utilities to test the constitutionality of the program, Judge John J. Gore overruled a motion by TVA counsel for dismissal of the suit.

The TVA claimed, among other grounds for dismissal, that some of the 19 power companies have not been affected by the Authority's vast hydroelectric developments on the Tennessee river. Judge Gore, however, held that while the utilities may be interested in the outcome of the case "in varying degrees," all were seeking the same relief—a court order holding some or all of the TVA's power activities to be either unconstitutional or in excess of the TVA act.

Counsel for the power companies have asked a temporary injunction to halt any expansion of the Authority's power program pending a final decision in the suit which will

be carried to the Supreme Court. The court indicated the case would be brought to a hearing on its merits promptly.

Company Wins Suit

CHANCELLOR J. LON FOUST on November 5th held that the Tennessee Electric Power Company franchise in Chattanooga was not revocable at the will of the city. The city had attacked validity of the franchise on the ground that it was originally granted in perpetuity in violation of the state Constitution. Therefore, the city insisted it was revocable on proper notice. The city attorney said the judgment would be appealed.

Chancellor Foust decided that "the powers granted to the defendant cannot constitute a legal monopoly since the right exists in the city to grant similar franchise rights." The ruling said the court was of the opinion, therefore, "that the grant of an unlimited franchise or consent by the city of Chattanooga is not a perpetuity but constitutes a property right of value which may not be impaired."

Texas

Vote For Rural Electrification

FARMERS of Denton last month voted unanimously to organize for rural electrification in that territory. A committee was named to conduct a survey and determine farmers wanting to go in on an electric line.

Cooperatives' lines would not be built where

utility lines already are furnishing service, it was said. Farmers who already have electric service cannot drop their connections with the present company and join in a cooperative line. Where the present utility company will render service, it was said the government would not compete with such service and would not build lines or service customers.

Washington

Authorizes Bond Issue

A CITY Light bond issue of \$5,500,000 was authorized November 2nd by the Seattle city council, which also accepted conditions under which the Federal government offered \$3,000,000 to help finance the lighting department's development plan in Seattle and on the upper Skagit river.

Proceeds of the issue, and the Federal money, will be used to finance building of a dam at Ruby creek, a second transmission line between the Skagit and Seattle, and improvements on a power substation. The program is to be completed by June 30, 1938. It was reported that the sale of bonds would not begin until the Federal contribution definitely was assured.

The Latest Utility Rulings

New Federal Taxes Substantially Minimize Rate Reduction

ELECTRIC customers of the Detroit Edison Company will, because of new Federal taxes and future uncertainties, miss by about \$1,500,000 a rate reduction which they might otherwise have. This fact was developed in a recent decision of the Michigan commission reducing rates approximately \$1,711,000, rather than a sum exceeding \$3,000,000, because the utility, if the new Federal tax laws "shall be held valid" and shall not be changed, will probably be required to pay added Federal taxes during 1937 amounting to approximately \$1,500,000.

Under the newly enacted tax laws, the commission said, it was difficult to figure what the exact increases would be. The commission estimated Federal unemployment insurance tax and Federal retirement tax. It recognized that there would be an increase in the rate of the Federal income tax and there would be the surtax on undistributed profits, but the amount of these, the commission said, it would not undertake to estimate. The commission added:

In addition to the foregoing new taxes, a recent law compels the stockholders of

this and other corporations to pay a second normal tax on the dividends received from the corporations in which they are stockholders. The corporation first pays the regular corporation or normal tax. Then a second normal tax is paid by the stockholder on the dividend he receives. Up until recently the dividends received by stockholders from a corporation were exempt from the payment of the normal income tax. The courts held that such fact increased the value of their dividends and should be taken into consideration by a commission in fixing a rate of return to be allowed upon the fair value of the utility. It would, therefore, appear that under the existing law which taxes said dividends, it would be the duty of a commission to allow a somewhat greater rate of return because of the fact that the dividends received by the stockholders are now subject to the normal income tax.

A return of 5½ per cent was allowed in view of the condition of the utility company and the surrounding circumstances. The company had refinanced so that it obtained bond money at a low cost and the company did not have to face serious competition by municipal plants. These factors were held to have a bearing upon the amount of return to be allowed. *Re Detroit Edison Co. (D-1722).*



Commission Approval Necessary to Change Interest Rate on Bonds

THE Pennsylvania commission held that any change in the interest rate on mortgage bonds of a water utility company would constitute an issue of bonds and that the making of such a change without the approval of the commission would constitute a violation of the Public Service Company Law.

Reduction of the interest rate was to be accomplished by the delivery of

bonds to the company by the owners, the substitution of the lower interest figure for the existing figure wherever it appeared on the face of the bonds, and the return of the bonds to the owners. The commission assumed a hypothetical case in which the company would refund its existing bonds by creating a new series of bonds bearing a lower interest rate, a different date

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for maturity, and new redemption provisions, and delivering the new bonds in exchange for those outstanding. Under these circumstances, it was said, no one would question that the creation and delivery of the new bonds would constitute an issuance subject to commission approval. The commission continued:

Further, suppose a proposed new issue has neither a different maturity date nor new redemption provisions, but that the sole difference between the two issues is the interest rate. Can it be said that if a bond issue differs from its predecessor in three characteristics, the creation and delivery of those bonds constitute an issuance, but if only one characteristic is altered, the creation and delivery do not constitute an issuance? In our opinion, proper and reasonable interpretation of the law requires a negative answer to this question.

The company, it was pointed out, had contracted with its bondholders to do certain things, one of which was to pay interest upon the principal loaned at a given rate per year. If this arrangement were altered in any respect, it was no longer the old contract, but a new and different one, even though the new contract was not newly printed or en-

graved, but written as an amendment upon the old bonds. When the company alters the interest rate figure on the face of the bonds it thereby creates a new bond issue, in the opinion of the commission, after which the new bonds will be delivered to the public in consideration for their previous surrender of the old bonds.

Each additional security, each variation in the interest rate of security issues, each change in maturity date has its effect upon the ability of the company to serve the public, said the commission, continuing as follows:

We feel that the legislature has placed upon this commission the duty to investigate all significant changes in the security structures of public service companies where such changes might adversely affect the public, and has conferred upon us the power to forbid changes not in the public interest. In our opinion, a variation in the interest rate of a security constitutes an important change in that security, and a change which might well be fraught with danger to the public.

Pennsylvania Public Service Commission v. Blue Mountain Consolidated Water Co. (Complaint Docket No. 11221).



Continuing Property Records Ordered by New York Commission

GAS, electric, steam, omnibus, and waterworks corporations having annual operating revenues of \$50,000 or more have been directed by the New York commission to establish by January 1st continuing records of property used in public service. Such records, according to Chairman Maltbie, will facilitate the application of a law, upheld by the court of appeals, which authorizes the commission to fix temporary rates pending final determination of rate cases and they will also reduce the time and expense which rate cases have in the past seemed to require. Chairman Maltbie said:

The public service commission is clearly authorized to require the keeping of such

records. The act conferring this power was part of the utility program of Governor Lehman in 1934.

The companies are required to file on or before February 1st a statement setting forth the units proposed to be covered in the continuing property record. The corporations are to keep such records of property and property retirements as will reflect, so far as practicable, the service life of all property retired and will permit the determination of the age of existing property. The records are also to reflect the salvage and cost of removing of property retired.

Records must be maintained supporting the utility company's books of ac-

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counts so as to show the reserves accumulated to provide for depreciation or ultimate retirement of property, separately for each operating property or fixed capital account.

Companies are forbidden to record in

the original cost shown in the continuing property records amounts charged in previous years to operating expenses, operating taxes, or other income or surplus accounts. *Re Records of Public Utility Corporations.*



Stock Issue Not Limited to Net Additions

A PUBLIC utility corporation was permitted by the Massachusetts Department of Public Utilities to issue stock in the amount of notes which had been issued to provide funds for additions and betterments, although the notes were in excess of net additions after deducting property retired. This decision was based upon the ground that since the corporation had charged the total retirements to the reserve for depreciation and the reserve still remained adequate, there appeared to be no reason why the company should also be required to pay toward the cost of additions and improvements an amount equal to such retirements from earnings. The reserve had been created out of earnings to provide for retirements and was invested in betterments and additions, resulting in a greater investment than was required to sustain the asset value of the outstanding capital. It was said:

When the retirements are charged to the depreciation reserve the effect is to transfer property equal to the amount of retirements from the depreciation reserve to the property represented by the capital. If, in these circumstances, the company is authorized to issue stock sufficient only to provide funds equal to the difference between the additions and retirements, it forces the company to apply earnings of double the amount of the retirements to replace such retirements

and thus, in effect, requires the ratepayers to pay twice the amount necessary to meet impairments in the stockholders' investment caused by retirements.

Chairman Murray dissented, with the statement that he did not believe the department should depart from its usual method and allow capital for a greater amount than the net increase in the company's plant investment plus unfinished construction, as such departure might establish a precedent which might cause other companies not financially stable to demand similar consideration. He declared that the depreciation reserve had been built up by charges to operating expenses, and this was the same as saying the customer contributed such charges in the rates paid in order to take care of property worn out in supplying him with electricity. He added:

Whenever the plant investment is credited (reduced) by property worn out and retired, an equal reduction in the assets which back up the existing capital stock occurs, and such reduction should be offset by new additions or betterments of an amount equal to the value of the property retired before any additional securities may be issued. Then additional securities may be issued against that amount of plant which represents the net additions.

Re Pittsfield Electric Co. (D.P.U. 5151).



No Addition to Tangible Value for Going Value

THE fact that a public utility company is a profitable venture gives the company its full value, said the Oklahoma commission, in denying an additional allowance for going value. The commission continued:

If it were not profitable, it would not be worth the outlay necessary to produce it, and conceivably might be worthless except for its junk value. The plausible but fallacious contention of utility companies with respect to the so-called item of going concern value is based on a false premise. It

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is based on the erroneous assumption that any utility property, regardless of circumstances is worth what it would cost to reproduce it and, therefore, since it is quite obvious that a profitable venture is worth more than an unprofitable one, there must be something added to the tangible value of the plant for this assumed additional value.

Testimony was introduced in behalf of the company to justify an additional allowance because of cost of attaching subscribers, cost of assembling and

training organization, cost of plant records, administration, certain interest items, cost of depreciation on idle plant before exchange opened, cost of maintenance and depreciation on idle plant after opening, and interest and taxes on idle plant after exchange opens. The commission disallowed all these items except the claim for cost of plant records. *Re Southwestern Bell Telephone Co. (Cause No. 10737, Order No. 10666).*



Suspensive Appeal in Rate Case Held Not to Deprive Utility of Property without Due Process

AMOTION by the Southern Bell Telephone & Telegraph Company to dismiss an appeal by the Louisiana commission from a lower court decree against a rate order was dismissed by the supreme court, and a determination was made that the appeal was suspensive rather than devolutive only. The rule established in the state that an appeal cannot be dismissed for an error or irregularity in the return date, unless the error or irregularity is imputable to the fault of the appellant, was cited as a ground for denying the motion to dismiss.

Contention was made in behalf of the telephone company that a suspensive appeal would deprive the company of its property without due process of law in violation of the Fourteenth Amendment to the Constitution of the United States, since it would result in compelling the company either to obey the commission order requiring a rate reduction or be subjected to penalties. The court rejected this contention, stating:

The case is now on appeal from a final judgment on its merits and is in the same

status and category as all cases on appeal from a final judgment. The appellee is in the same situation as any other litigant who claims to be wrongfully deprived of his property, and its counsel fail to appreciate the difference between depriving one of his property pending a court's decision on a suspensive appeal, and being deprived of it without due process of law. *Whether or not plaintiff is being deprived wrongfully of its property can only be judicially determined by a final judgment of this court.* It is no more a denial of due process of law for appellee to be temporarily deprived of its property, pending a final judgment of this court, wherein it might be determined to have been wrongfully deprived thereof, than it would be to permit appellee to wrongfully charge high rates to its subscribers if the order is finally determined to be proper and legal. No one would seriously contend, under our established jurisprudence or procedure, that the due process clause of the Constitution of the United States was violated by permitting a litigant, who was held by the district court to be illegally in possession of plaintiff's property, to have the judgment of the lower court reviewed on a suspensive appeal, which, of course, gives appellant the right to retain possession until the final judgment.

Southern Bell Telephone & Telegraph Co. v. Louisiana Public Service Commission.



Right to Continue Operation When Insurance Company Denies Liability on Policy

THAT a motor carrier operator had failed to satisfy a claim based upon injuries sustained in an accident in

which his truck was involved, where the insurance company had denied liability on its policy, was not considered by the

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Pennsylvania commission a sufficient ground for refusing to renew authority to operate. There was no evidence of lack of good faith on the part of the operator.

The motor carrier had been unable to pay the full annual premium in advance when he obtained a liability policy, but he agreed with the broker to make monthly payments. He was delinquent in making payments and received a notice that his policy would be canceled. Before the date of cancellation he paid the monthly premium by a postdated check and was assured that the policy

would not be canceled. When summonses were sent to the insurance company, however, the insurance carrier denied liability on the ground that the policy had ceased to be in force. The operator immediately purchased insurance from another company.

The commission pointed out that the motor carrier had followed an established and an apparently approved practice of the insurance carrier and had no reason to doubt that he had provided for his legal liability for claims arising from accidents. *Re Kovler (Application Docket No. 31695, Folder 2)*.



Motor Carrier Service Detrimental to Rail Carrier Not in the Public Interest

THE Maryland commission denied the application of a motor carrier operating between Annapolis and Maryland to have its authority amended so as to permit the carriage of through passengers between these points. Operations of the motor carrier had been unprofitable, and it was hoped by the applicant that the addition of through service would justify continuance of operation.

Denial was based upon the ground that additional traffic secured by the motor carrier would be at the expense of a railway operating between these points, which was earning sufficient to pay its operating expenses and a little over, but was not earning sufficient to pay interest on its debts. To that extent, it was said, its situation was precarious.

The commission considered a contention by the motor carrier that neither the interests of the motor carrier nor the railway but the public interest should be considered. The commission expressed the opinion that the public generally included all the public rather than the people living between Baltimore and Annapolis who might be deprived of the motor carrier service if it could not be made profitable. The railway service was said to be the more important from the point of view of the public regarded as a whole. Moreover, the railway company offered to furnish bus service to intermediate points not on the railway line in case the existing motor carrier service should be forced to discontinue because of insufficient revenues. *Re Red Star Lines, Inc. (Case No. 3996)*.



Other Important Rulings

THE supreme court of Oklahoma held that in a field already occupied by a telephone company, before another person, firm, association, or company would be permitted to build another telephone line to accommodate telephone subscribers, application must first be

made to the commission, and if authority were denied by the commission the remedy of the aggrieved party would be by appeal to the supreme court and not by writ of prohibition. *Simpkins et al. v. Oklahoma Corporation Commission et al.* 60 P. (2d) 1048.

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

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Mayor & Aldermen of City of Lawrence

v.

Lawrence Gas & Electric Company

[D. P. U. 4970.]

Depreciation, § 51 — Electric utility.

1. An appropriation to depreciation reserve of somewhat less than 2 per cent upon the depreciable property of an electric utility appeared not to be unreasonable, p. 354.

Expenses, § 86 — Payments to affiliate — Cost of power — Contracts — Alternative source.

2. No abuse of discretion by corporate officers and no unreasonableness in a contract with an affiliated company for the purchase of all electricity used by an electric utility were found, notwithstanding a contention that the company could have either generated all of its electricity by increasing its investment or used the capacity of its present plant supplemented by the purchase of peak energy from a canal company, where this would involve the use of power available from a canal which was alleged not to be firm power and not to be reliable and the price for which, it was alleged, could be raised upon a year's notice, p. 355.

Expenses, § 84 — Payments to affiliate — Management and other services — Contracts.

3. That the reasonable cost of certain management, purchasing, merchandising, advertising, and engineering services, under contract with an affiliate, ought to be considerably less in the future was taken into consideration in fixing rates, p. 356.

Return, § 27 — Reasonableness — Attraction of capital — Dividends.

4. Ordinarily earnings which will enable a company under normal conditions, after proper provision for depreciation, to pay dividends sufficient readily to attract new capital into the enterprise at a price at least as high as the average amount paid into the treasury of the company per share by the stockholders, would provide a reasonable return, p. 356.

Return, § 22 — Reasonableness of dividend — Factors considered.

5. Regard must be had for fluctuations likely to occur in the market price by reason of new issues being placed upon the market, in determining what amount of dividend is necessary to attract capital at a price at least as high as the average amount paid into the treasury of the company per share by the stockholders, p. 356.

Return, § 22 — Reasonableness — Dividends.

6. The fact that the Department or its predecessors have required stockholders to pay a higher price, by fixing the price at which increased stock should be offered to stockholders, should be taken into consideration in determining what amount of dividend is necessary, p. 356.

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Return, § 87 — Electric utility.

7. An 8 per cent dividend on an electric company's stock was deemed adequate to maintain the stock in the market at the amount, or in excess of the amount, representing the average amount per share paid into the treasury by stockholders, p. 356.

Expenses, § 30 — Flood losses.

8. The cost of repairing damage caused to an electric utility by flood, so far as the loss is not properly chargeable to depreciation, must be met from earnings or other cash resources, and allowance therefor must be made in determining rates, p. 357.

Expenses, § 31 — Flood losses — Amortization.

9. An allowance for cost of repairing damage caused by flood, to the extent that it is allowed in determining rates, should not be met in one year but should be spread over several years, p. 357.

[October 5, 1936.]

PETITION for reduction in gas and electric rates; reduction of electric rates ordered.

By the DEPARTMENT: This is a petition filed by the mayor and aldermen of the city of Lawrence, seeking to have the Department order the Lawrence Gas and Electric Company to reduce the prices charged by it for gas and electricity. The petitioners have elected to proceed on the premise that the electric rates solely are unreasonable.

The subject company is a combination company, supplying both gas and electricity. The company was organized in 1850 to manufacture and distribute gas, and since 1892 also has engaged in the electric business.

[1] The par value of the outstanding capital stock of the company is \$4,700,000, and there has been paid into the treasury thereon in premiums \$1,413,742.26. On December 31, 1935, the corporate surplus of the corporation amounted to \$1,361,319.13. The company has outstanding bonds of \$1,500,000. Its plant investment as of December 31, 1935, amounted to \$10,263,994.26, of which \$3,714,-

877.18 was represented by its gas properties and \$6,549,117.08 was represented by its electric properties. The company appropriated, in the year 1935, to its depreciation reserves, \$175,000. This is somewhat less than 2 per cent upon its depreciable property and thus appears not to be unreasonable. The total reserve for depreciation on December 31, 1935, was \$1,845,958.58. The net operating income of the company for the year ending December 31, 1935, was \$636,793.29, a decline from that of the year ending December 31, 1934, of \$24,399.72, while its operating revenues for the year 1935 increased over those of 1934 by \$80,448.17. Its operating expenses increased in the same period \$135,445.25, and but for the fact that there was a decrease in the uncollectible revenues of \$7,330.06, and a decrease of the amount paid for taxes of \$23,267.30, the decline in 1935 in the net operating revenues from that of 1934 would have been \$54,997.08.

MAYOR & ALDERMEN OF LAWRENCE v. LAWRENCE GAS & E. CO.

This decline, however, was offset by an increase in the nonoperating income of \$33,066.53, which resulted in an income balance for the year 1935, after the payment of interest charges, of \$570,455.72, which was \$8,624.24 larger than for the year ending December 31, 1934. The company paid out in dividends during the year, \$592,200, which amounted to 9.68 plus per cent on the par value of the stock plus the premiums paid in thereon, and 7.92 per cent on \$7,475,061.39, the amount of the par value of its stock plus premiums paid in thereon and its surplus.

In the year 1935 the total amount of electricity sold to general consumers amounted to 41,845,536 kilowatt hours, at an average price of 4.21 cents. These sales were made through twelve rate schedules, together with certain special contracts. Under the special contracts the sales amounted to 11,225,684 kilowatt hours. We think that this number of schedules is more than is reasonably necessary and that the company should endeavor to simplify its rate structure by reducing the number of schedules.

The petitioners claim that the rates are unjust and unreasonable on the ground that they permit of excessive earnings. The petitioners submitted much evidence in support of this contention.

[2] Much of the time of the hearings was spent by the petitioners in criticism of the purchase contract made by the company with the New England Power Company in 1928, whereby the New England Power Company sells to the Lawrence Company practically all of its electricity. The petitioners maintained that had

the Lawrence Company either generated all of its electricity or used the capacity of its present plant supplemented by the purchase of peak energy, either alternative would have proved to be more economical for the company than the contract with the New England Power Company. It was claimed that the price paid was too high; also, that by the use of the water power available to the company from the canal owned and operated by the Essex Company and that by the use of existing facilities and by the installation of some new equipment, the Lawrence Gas and Electric Company would not have been obliged to have purchased power, except at peak periods, to meet the requirements of its customers. On the other hand, the company contended and introduced evidence to show that the power available from the canal was not firm power, could not be relied upon, and that the Essex Company could raise the price upon a year's notice, that the expenditures involved in the installation of the new equipment would not be justified, and that under all the circumstances the cost of power purchased by the Lawrence Gas and Electric Company from the New England Power Company was reasonable. The contention in substance, raises the questions whether it would have been better to have increased the steam-generating facilities of the Lawrence Company, thereby very substantially increasing its investment, or to have used the present plant and purchased peak electricity, rather than to have entered into a contract for the purchase of electricity whereby it purchases from the New England Power Company practically all of its requirements. We

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have given careful consideration to this issue, having in mind what the court said in *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 U. S. 276, 289, 67 L. ed. 981, P.U.R.1923C, 193, 200, 43 S. Ct. 544, 31 A.L.R. 807:

"The Commission is not the financial manager of the corporation and it is not empowered to substitute its judgment for that of the directors of the corporation; nor can it ignore items charged by the utility as operating expenses unless there is an abuse of discretion in that regard by the corporate officers."

Upon the evidence and under all the circumstances, we are not satisfied that in this case there was an abuse of discretion by the corporate officers or that the contract was so unreasonable that the company was unwarranted in entering into it.

[3] A contract existing between the Lawrence Company and the New England Power Service Company under which the Service Company renders to the Lawrence Company certain management, purchasing, merchandising, advertising, and engineering services was attacked by counsel for the petitioners in his argument, it being contended that the amount paid for such services in 1935 was excessive. Notwithstanding that the gross income of the company increased in the year 1935 over that of the year 1934 by only \$8,666.81, the amount paid by the Lawrence Company to the Service Company under the provisions of the contract between them increased in 1935 \$7,199.05 over that paid in 1934. A contract has been made by the company with the New England Power

Service Company under date of April 29, 1936, effective as of April 1st and terminating April 1, 1938, covering services of a like character to those covered by the contract in effect in 1935. By the provisions of the contract now in effect payments are based upon the cost of service to the Service Company and this cost is to be determined by direct charges and "a fair and equitable allocation of the Service Company's general charges." Such charges are to include a fair proportion of the Service Company's overhead, such as rent, light, heat, telephone, insurance, taxes, interest, and depreciation. No evidence was introduced by the petitioners to show that the services rendered by the Service Company were unnecessary or that the payments made therefor were in excess of the cost of the Service Company, as defined in the contract, in rendering the services required or that the payments made were in excess of the value of the services rendered. However, in view of the amount paid for such services in 1934 and 1935, we are of the opinion, basing our judgment upon our knowledge of the cost to independent companies of like services, that the reasonable cost of such services in the next several years ought to be considerably less than the cost in 1934 and 1935, and we have taken this into consideration in arriving at our conclusion.

[4-7] It has been the view of this Department that ordinarily earnings which will enable a company under normal conditions, after proper provision for depreciation, to pay dividends sufficient readily to attract new capital into the enterprise at a price at least as high as the average amount paid into

the treasury of the company per share by the stockholders are a reasonable return. In determining what amount of dividend is necessary to attract capital at such a price, regard must be had for the fluctuations likely to occur in the market price by reason of new issues being placed upon the market. Where the Department or its predecessors have required the stockholders to pay a higher price by fixing the price at which the increased stock should be offered to its stockholders, that, too, should be taken into consideration. With the growth of holding company control and the consequent withdrawal of the stock of operating companies from the market, we have not generally the evidence of the market value of the stock to guide us as to what return is necessary to pay dividends to maintain the stock in the market at the average price paid for the stock or at a price heretofore fixed by the Department or its predecessors. We have only the evidence of the market value of the stock of other companies engaged in the same or a similar business. The last occasion upon which the issue price of stock of this company was fixed by the Department or its predecessor was in 1909, when it was fixed at \$160 a share by the Board of Gas and Electric Light Commissioners. The par value of its stock then was \$100 a share, and \$40 a share upon its present par value of \$25 a share is its equivalent. The average amount per share paid into the treasury of the company by its stockholders is slightly over \$32 a share. An 8 per cent dividend upon the par value of the stock of the Edison Electric Illuminating Company of Boston now maintains its stock at bet-

ter than \$160 a share in the market. We think, therefore, that an 8 per cent dividend on the Lawrence Company's stock would maintain its stock in the market at \$32, or more, a share, and probably at \$40 a share. To pay 8 per cent dividends upon the par value of the company's stock would require \$376,000 annually. A reduction in rates which would reduce the company's annual net income by not more than \$190,000 would leave sufficient to pay 8 per cent upon the par value of the company's stock based upon the company's business in 1935, if it were not for the serious losses sustained by the company in this year's flood and the apparent trend in increased operating expenses.

[8, 9] A considerable amount of testimony was introduced by the Lawrence Company, over the objection of the petitioners, tending to show the damage sustained by the company in the Spring flood of this year. The evidence submitted was to the effect that the loss suffered by the company will amount to approximately \$140,000. In arriving at our decision we have given weight to this evidence.

The cost of repairing the damage caused by the flood must be met. A part of the loss probably can be charged to depreciation and thus permit the company to capitalize to this extent, at least, indebtedness properly incurred for additions and replacements necessary by reason of the flood. That which cannot be met in this way must be met from earnings or other cash resources, and allowance therefor must be made in determining the rates. We think it unnecessary that that part of the loss which must be provided for

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through earnings should be met in one year. We think, if necessary, it may properly be spread over several years.

We think that the contention of the petitioners that the domestic and commercial rates are unreasonably high is sustained and that they should be reduced. We are of the opinion that in the end both the company and the customers will benefit thereby.

We believe that the company may properly be required to reduce the maximum rates of both its "A" and "C" rates 2 cents a kilowatt hour. While it is difficult to determine with absolute accuracy the effect upon the company's revenues, we are satisfied that the reduction in revenue will not exceed \$190,000 a year, based upon the present volume of its business. This would be offset to some extent by reduced payments under the service

contract. Some of this reduction, it is fair to assume, will be offset by the increased use of electricity, and we believe this will be sufficient in the immediate future to offset the rising trend of operating costs.

The petitioner, the mayor of Lawrence, filed requests for rulings of law, nine in number. Requests numbered 1, 2, 7, 8, and 9 we grant. We deny request numbered 3. Construing request numbered 4 as a request that the contract referred to therein is subject to review and thus subject to changes in its terms by this Department, we deny the request. As the contract dated April 1, 1936, was not brought in to question during the hearings until the argument of counsel for the petitioners, we deny request numbered 5, and as a consequence deny request numbered 6.

WISCONSIN PUBLIC SERVICE COMMISSION

Re Madison Gas & Electric Company

[2-U-1019.]

Service, § 179 — Duty to furnish — Wholesale power to coöperatives.

1. An electric utility company, although it has never held itself out as a wholesaler but has operated as a local utility serving one central city and the immediately surrounding territory, is obligated to furnish current to a rural coöperative organization applying for service to be delivered at a point within the territory which the utility professes to serve, p. 360.

Service, § 181 — Grounds for denial — Necessary expansion of facilities.

2. An electric utility company cannot deny service to a rural electric coöperative organization on the ground that this might require a large additional investment in lines and equipment if the coöperative bears its fair share of the expense of extending the service and is willing to take service under reasonable rules and regulations of the utility, p. 360.

Service, § 176 — Rules and regulations — Contract with coöperatives.

3. An electric utility company required to furnish service to a rural elec-

RE MADISON GAS & ELECTRIC CO.

tric coöperative organization may properly apply such of its rules and regulations on file as may be applicable to a customer of this kind, including rules governing deposits and guaranties, and may include in the service contract such other reasonable rules and regulations subject to Commission approval as appear necessary to protect the company from secondary liability and interference with standard service to its customers and impairment of service to telephone subscribers adjacent to its lines, p. 363.

[August 28, 1936.]

INVESTIGATION of refusal by electric utility to furnish wholesale service to a rural electric coöperative organization; service ordered.

By the COMMISSION: This proceeding was instituted on motion of the Commission on July 9, 1936, when it became apparent that informal negotiations had failed to secure the filing of a wholesale rate for rural electric coöperatives. Thereafter the Commission received a formal complaint from the Rural Electrification Coördination Committee. The two matters were joined in the one proceeding.

Hearings were held at the capitol in Madison, on July 30, 1936, and on August 10th and 11th. At the first hearing appearances were entered for the Madison Gas & Electric Company by Mr. R. M. Rieser, Attorney, Madison, and for the Rural Electrification Coördination Committee by Mr. B. W. Huiskamp, Attorney, Madison. At the second hearing the following appearances were entered: Madison Gas & Electric Company, by R. M. Rieser of Olin & Butler, Attorneys, Madison, and George Wagner, General Superintendent; Rural Electrification Coördination Committee, by B. W. Huiskamp, Attorney, Madison; Wisconsin Power & Light Company, by William Ryan of Schubring, Ryan, Petersen & Sutherland, Attor-

neys, Madison; Village of Clark Earth, by Al. Mickelson, Clerk, and Wm. Hacker; Board of Directors of the Dane-Iowa Electric Coöperative, by Otto Oimoen, Riley, and Ted Theobold, Barneveld.

The Dane-Iowa Electric Coöperative was duly incorporated under Wisconsin coöperative laws in April, 1936, to build, acquire, and operate electric lines and equipment for rendering electric service to its members. After a canvass some 450 prospective customers have signified their intention of taking electricity. There are approximately 600 potential users in the area. A project has been set up to build lines in unserved portions of the towns of Middleton, Verona, Springdale, Primrose, Perry, Blue Mounds in Dane county, Brigham and Moscow in Iowa county, and York and New Glarus in Green county. Approximately 150 miles of line are contemplated. The anticipated demand is about 150 kilowatts and a monthly consumption of about 45,000 kilowatt hours was estimated by the engineer for the coördination committee, after a development period of about two years. The coöperative on May 19th signed a loan contract with

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the Federal Rural Electrification Administration for \$160,000. The coöperative has requested connection with the lines of the Madison Gas & Electric Company at a point in section 36 of the town of Middleton. It has also requested application of one of the standard rate schedules filed by the utility.

The Madison Gas & Electric Company has a 3-phase, 4-wire, 2,300-4,000-volt line extending about 9 miles from the Randall substation in the city of Madison to a point within a half a mile of the proposed connection. There is a single-phase branch on private right of way in the half mile from the end of the 3-phase line to the desired point of connection.

The Wisconsin Power & Light Company has an 11,400, 3-phase line extending along the western boundary of section 36. This line runs between Middleton and Verona.

The coöperative proposes to install transformers at the point of delivery in order to step up the voltage to 6,900. A 3-phase line from the point of connection nearly to Daleyville is contemplated.

Most of the testimony bore on the questions (1) whether the Madison Company's line and the substation from which it extended were of sufficient capacity to furnish adequate service to a load with the size and characteristics of the coöperative and (2) what the probable power requirements and credit of the coöperative would be. The company asserted that the line to which connection was asked would not furnish reliable or adequate service either to the coöperative or to other customers served from that line. It was also stated that the Randall

substation had insufficient capacity. The company's engineer submitted estimates, ranging from \$64,000 to \$102,000, of the cost of furnishing additional facilities adequate, in his judgment, for serving the coöperative without prejudice to other customers.

The engineer for the coöperative testified that in his opinion the line was adequate at least as far back as Nakoma. He also gave his estimates, as far as they could now be made, of the probable load, consumption, and revenue. He stated that a reasonable deposit to assure payment of bills would adequately protect the utility and that the utility's liability for damage to person or property arising from service to the coöperative could be taken care of by insurance.

In the Commission's opinion the above issues are of secondary importance. They involve questions of engineering or commercial practice which we do not propose to determine in this opinion. Such matters can be settled after we have first resolved the primary issue in this proceeding.

[1, 2] The initial question in this proceeding, as counsel for the company correctly stated in his opening remarks, is simply this: Can the Commission legally require the company to serve this applicant? This is primarily a legal question. Nevertheless, it involves economic considerations.

The company states that it has never held itself out as a wholesaler, either within or without its territory. It claims to be a local utility, serving one central city and the immediately surrounding territory. Its plant and facilities are alleged to be designed only to serve this limited market and

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area. The rates of this utility are among the lowest in the United States. The company does not desire, and does not believe it can be legally required to undergo the expense of serving the coöperative if that means throwing additional expenses on the shoulders of present local customers.

The coöperative stands in the position of an applicant for service. It has asked for connection to an existing line of the utility. While the requested point of delivery is on the edge of the company's present market area, the company is not asked to deliver power outside the territory it professes to serve. The coöperative intends to take this power, redistribute, and resell it to its members, in accordance with the purposes for which it has been incorporated. This is commonly classed as resale service.

Nothing on the record or in the reports of the company to the Commission indicates that such resale service is now being supplied. The company furnishes electricity to private dwellings, flats, rooming houses, apartment buildings, and hotels, as well as stores, shops, offices, and factories. In some instances a landlord may furnish energy to his tenant on the same premises without submetering. This kind of service, as well as submetering as practiced in some large cities like New York, is distinguishable from that here involved. In addition, the company serves the university, the Forest Products Laboratory, and other public institutions. Street lighting, water pumping, and sewage pumping are services furnished to the city of Madison and some suburban villages or towns. But the company does not supply any

municipally owned distribution utilities for resale to the inhabitants.

However, we do not believe that the use which the coöperative intends to make of the service is determinative of the legal question involved. The company's obligations stop with the delivery of energy. What use the coöperative may devote the energy to beyond the point of delivery affects the classification of service, but not the legal obligation to serve as long as the coöperative complies with reasonable service and collection rules of the utility.

The company professes to serve all who apply for service within its market area and who are able and willing to comply with reasonable rules and rates. As a utility, the company has this obligation. This duty goes with the exclusive privilege of serving in its territory. The company is protected from territorial competition by operation of law. It is the sole agency to serve the public. In view of this privilege, it cannot arbitrarily or capriciously pick and choose whom it will serve within its chosen area. This has been an elementary principle of public utility law and of the common law. The only qualification of this principle is that the customer must be willing and able to comply with reasonable rules and pay reasonable rates. For aught the record shows, the coöperative accepts this responsibility. What more can be asked?

The company emphasizes that to serve the coöperative might require a large additional investment in lines and equipment. It is alleged that the Randall substation has nearly reached the limit of its capacity and that there

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may not be sufficient room for expansion at the present site. As long as the coöperative bears its fair share of the expense of extending the service, the company is not warranted in denying service on this score. Certainly the company admits its obligation to enlarge its plant to meet expanding demands of present customers. It has done so in the past, and does not deny this obligation for the future. We fail to see why the fact that a new customer necessitates this expansion, rather than old customers, relieves the company of its legal duty to serve all who apply, under reasonable rules and regulations.

Briefly, here is an applicant for service within the territory which the utility professes to serve. The applicant asks for a standard filed rate. It has not denied its obligation to abide by reasonable rules and regulations. While the applicant's immediate use of the service may appear dissimilar to that of existing customers, the ultimate use of the service is the same as that of the company's present customers, namely, for lighting, heat, and power. We can find no warrant for the company's refusing to serve under reasonable rules and rates.

The company has on file rules setting forth the conditions under which service will be extended to new customers. We quote below Rule 4 of the company's extension rules:

"For a customer whose estimated consumption is more than 1,800 kilowatt hours per year and will probably so continue for several years, the company will extend its distribution system, without charge to the consumer, provided the cost thereof does

not exceed three and one-half times the estimated annual revenue, but any cost in excess thereof shall be paid by the consumer, and deposit made of the estimated amount thereof in advance of the starting of the construction work, and adjustment made after completion thereof on the basis of the actual cost. Such cost shall include all material and labor plus 15 per cent to cover engineering, superintendence, clerical labor, rental of tools, transportation of men, etc. If the customer's consumption exceeds the estimated revenue the first year the company will make a refund on the basis of the first year's consumption. This paragraph shall not apply to a customer whose consumption will probable be only temporary."

It will be noted that the company will invest three and one-half times the estimated annual revenue from the prospective new customer. If the investment necessary to extend service exceeds this sum, the customer must advance the excess.

This and other extension rules were designed to protect the company and its existing customers from uneconomic extensions. Obviously, if the company were required to make a large investment in lines and equipment to extend service and the revenue from the new customers was insufficient to pay their share of the operating expenses and fixed charges on the added investment, someone else would have to shoulder the excess of costs over revenues. Ordinarily this burden would be borne either by other customers in the form of higher rates or by the stockholders, unless reasonable rules limiting such investments are established.

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Extensions of service have been made in the past under these rules and at existing filed rates. It does not appear that the customers or stockholders have been unduly burdened thereby. The information before us at this time does not warrant our finding these rules unreasonable or inapplicable. We shall, however, retain jurisdiction to make such adjustments as appear reasonable and proper in the light of any further information.

The coöperative asks for service at either of two rates: (1) the "Standard Rate for Alternating Current Power Service" or (2) the "Large Commercial Lighting and Power Rate." The former rate schedule is designed for power service and only incidental lighting load, limited to 20 per cent of the total demand during the months of October to March. From the available information it does not appear likely that the coöperative can qualify for this schedule.

The combination light and power schedule has no limitation on the proportion of lighting load, the service requirements of which are more exacting than for power. None of the other availability rules of this schedule seem to disbar the coöperative from qualifying. This schedule therefore seems the one most applicable to the coöperative's load, so far as its characteristics are now known, and in our opinion, should be the one offered by the utility. In summary form, this schedule is quoted below:

Demand Charge

First 50 kw. of demand, \$1.667 per kw. per month.
Over 50 kw., \$1.50 per kw. per month.

Energy Charge

First 10,000 kw. hr. used per mo. @ 1½¢ gr.
1½¢ net per kw. hr.
Next 10,000 kw. hr. used per mo. @ 1½¢ gr.
1½¢ net per kw. hr.
Next 30,000 kw. hr. used per mo. @ 1½¢ gr.
1¢ net per kw. hr.
Over 50,000 kw. hr. used per mo. @ 1¢ gr.
1¢ net per kw. hr.

Minimum Monthly Bill—The demand charge.

Determination of Demand—Measured Demand.

The demand for customers (except public, private, or parochial schools, churches, missions, and charitable institutions) having a connected load of 25 kw. or more, and at the option of the company, for smaller customers, shall be determined by demand meters or another approved method. The billing demand shall be the greatest rate at which electrical energy has been used during any period of fifteen consecutive minutes within the last preceding twelve months.

[3] We believe it is reasonable for the company to apply to the coöperative receiving service under the above rate schedule such of its rules and regulations now on file as may be applicable to a customer of this kind. Among the applicable general rules is that governing deposits and guaranties. The Commission also believes that the company may include in the service contract such other reasonable rules and regulations as appear necessary to protect the company from secondary liability and interference with standard service to its customers and impairment of service to telephone subscribers adjacent to its lines. Such special rules and regulations are subject to the Commission's approval.

Other utilities serving areas adjacent to that of the coöperative project were notified of the second hearing in this proceeding and their appearances were duly entered and copies of the transcript of the first hearing were sent to them. These other utilities advanced no special interest or claims which require the Commission's consideration in this proceeding. The

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fact that most of the coöperative members live in an area partly served by other utilities than the Madison Company does not alter our findings in this case. We have dealt with this question in other similar cases, notably 2-U-991, Wisconsin State Rural Electrification Coördination Committee v. Wisconsin Pub. Service Corp. and the views therein expressed on this point are adopted for the purposes of this case.

Based upon the foregoing considerations, the Commission finds and determines that the Madison Gas & Electric Company is operating as a public utility with facilities available for service to the area herein involved and that public convenience and necessity require service be rendered to the Dane-Iowa Electric Coöperative, pursuant to the company's filed extension rules, at a point of delivery within the company's existing service area mutually agreed upon between the company and the applicant for service. The Commission further finds that, from the informa-

tion before us at this time, the company's present combination light and power rate schedule is reasonably applicable to service rendered the Dane-Iowa Electric Coöperative when connection is made under the filed extension rule.

It is therefore *ordered*, that Madison Gas & Electric Company shall render service to the Dane-Iowa Electric Coöperative, pursuant to the company's filed extension rules, at a point of delivery within the company's existing service area as mutually agreed upon between the company and the applicant for service.

It is *further ordered*, that Madison Gas & Electric Company shall apply its filed combination light and power rate schedule to service rendered to the Dane-Iowa Electric Coöperative when connection is made under the company's filed extension rule.

It is *further ordered*, that the Commission retain jurisdiction to make such amendments or supplementary orders as appear necessary and reasonable.

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Re Extensions of Rural Lines of Electric Utilities

[2-U-965.]

Monopoly and competition, § 54.1 — Rural electrification — Rules and regulations.

1. Rules should be established whereby competition between privately owned utilities and coöperative associations in rural areas may take place on a fair plane of equality, p. 367.

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Monopoly and competition, § 8 — Powers of Commission — Rural electrification — Utility companies — Coöperative associations — Rules and regulations.

2. The Commission has authority to establish rules and procedure for orderly development of rural electrification in territories where privately owned utility companies and coöperative associations propose to serve, so as to prevent wasteful territorial competition and duplication, p. 368.

Monopoly and competition, § 54.1 — Rural electrification — Privately owned and coöperative utilities.

3. Privately owned electric utilities and organizers of a coöperative association should have an open opportunity to solicit customers, and bring to them the information necessary to a choice of how and when electric service can be obtained, up to a point where a coöperative association is formed and a loan contract signed with the Federal Rural Electrification Administration, p. 371.

Monopoly and competition, § 54.1 — Rural electrification — Privately owned utilities and coöperative associations.

4. When a duly organized coöperative association has laid out a project for rural electrification and has signed a loan contract with the Federal Rural Electrification Administration, it appears uneconomic to authorize additional construction by any other agency, without good cause shown, at least until the costs and conditions of service by the coöperative are definitely known, p. 371.

Monopoly and competition, § 54.1 — Rural electrification — Privately owned utilities and coöperative associations.

5. Where plans for a rural electrification project have not reached the stage where an association has been organized and a loan contract signed with the Federal Rural Electrification Administration and where an existing utility has projected an extension to reach bona fide applicants for service, denial of the privilege of construction by the utility, except for compelling reasons duly shown, appears unwarranted, p. 371.

Monopoly and competition, § 100 — Application to approve extension — Chain extensions — Rural electrification.

6. Exemption of public utility companies from a requirement that application be made to the Commission when a short rural electric extension is proposed should be limited to instances where one primary extension is to be made, but if such a short extension is one link in a chain of short, exempt extensions, application should be made to the Commission, p. 372.

Service, § 320 — Rural electric extensions — Coöperative associations.

Discussion of the promotion of rural electric coöperative associations and other Rural Electrification Administration projects in the state of Wisconsin, p. 369.

Certificates of convenience and necessity, § 102 — Rural electric extensions — Rules and regulations.

Rules governing extensions of electric utilities in Wisconsin towns covering matters relating to conflicting rights of private utilities and coöperative organizations and exemption of particular areas, p. 373.

[August 27, 1936.]

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HEARING on question of possible extension or modification of order relating to extensions of rural lines of electric utilities; rules and regulations amended. See also 14 P.U.R. (N.S.) 25.

By the COMMISSION: After due notice and hearing, the Commission on March 20, 1936 (14 P.U.R. (N.S.) 25) issued a temporary order modifying the rules theretofore prescribed in General Order 2-U-20 (P.U.R.1932A, 411) in so far as extensions of electric utilities in towns were concerned. These modified rules provided that utilities desiring to extend rural lines at primary voltage for a distance of more than one mile must file notice with the Commission. If within ten days of such filing no objection to the proposed extension was raised and the requirements of the Commission were met, construction might then proceed without further notice. It was also provided that utilities meeting certain standards might obtain exemption from the above rules if found consistent with public convenience and necessity. These rules were issued in order to promote an orderly, economic development of rural lines, in view of renewed interest in rural electric service and the activities of certain groups interested in promoting service through rural coöperative associations.

By the terms of the order of March 20th, *supra*, it was to be effective only until September 1, 1936. In order to obtain the views of interested parties on possible extension or modification of the order, a hearing was held in the state capitol at Madi-

son on August 1, 1936. The following appearances were entered:

Wisconsin Power & Light Company, by G. C. Neff, President, B. E. Miller, Secretary, Madison; William Ryan, of Schubring, Ryan, Petersen & Sutherland, Attorneys, Madison; Wisconsin Utilities Association, by F. A. Coffin, Milwaukee; Wisconsin Public Service Corporation, by A. J. Goedjen, Green Bay; Interstate Power and Light Company, by Leroy Mason, Lancaster; Marshfield Municipal Utility, by George Marvin, Marshfield; Commonwealth Telephone Company, by W. E. Limbocker, Madison; North American Companies and The Milwaukee Electric Railway & Light Company, by G. W. Vanderzee, Milwaukee; Rural Electrification Administration, by B. W. Huiskamp and John A. Becker, Madison.

Representatives of the utilities have asked that our order of March 20th, *supra*, be allowed to lapse by its own terms. But if, in the Commission's opinion, a continuance of this order is deemed warranted, the utilities ask that the permissible length of extension without review by the Commission be raised from 1 mile to 5 miles. One utility also suggested that the Rural Electrification Coördination Committee be requested to file a statement of all areas where coöperative associations had been formed and that the operation of the

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Commission's order be restricted to those areas.

The Rural Electrification Coördination Committee has asked that our order of March 20th, *supra*, be not only extended but made more restrictive on utility operations. Particularly, the committee asks that the utilities be prevented from making any extensions to farmers included in a coöperative project which has received an allotment from the REA. The Commission is also requested to prohibit chain extensions of less than 1 mile designed to evade the procedure required by the March 20th order.

In this opinion the Commission proposes to deal first with the legal basis of our orders in this docket. It is essential, however, that the circumstances giving rise to these orders be fully understood. We stated these circumstances at some length in our opinion of March 20th, *supra*; only a brief summary need be given now.

For about a year the Federal government, through the Rural Electrification Administration, has been offering to lend funds for building new rural electric lines. In this state a Rural Electrification Coördination Committee was formed to aid in promoting coöperative associations of farmers desiring to borrow funds for the construction of lines to serve themselves. Many such associations have been formed and some have signed loan contracts.

These activities have brought the coöperatives into conflict with the utilities desiring to serve the same area. Sharp competition results. On the one hand the utilities seek contracts with farmers for line extensions; and

on the other those organizing the coöperative association seek members. In many areas, both agencies solicit the same individuals.

This competition takes place in towns which, according to a ruling of the Wisconsin supreme court, have no authority under the statutes to grant exclusive permits or franchises to utilities. *South Shore Utility Co. v. Railroad Commission*, 207 Wis. 95, P.U.R.1932B, 465, 240 N. W. 784. Under existing statutes and court decisions, therefore, rural territory is an open field so far as franchise rights are concerned.

All agencies engaged in this competition realize that unregulated competition and duplication lead to wasteful, uneconomic results. The Rural Electrification Administration recognizes this in refusing to lend money to build parallel lines. The coöperatives recognize it in asking that the utilities be prevented from building lines until the coöperative has a chance to see what it can do. The utilities recognize it in seeking to build lines before the coöperatives can get established.

Under present statutes no governmental body has jurisdiction over both competitors to lay down rules of fair competition. It is urged upon the Commission that coöperative associations serving only members are not public utilities under existing statutes as interpreted by the Wisconsin supreme court in the *Schumacher Case* (1924) 185 Wis. 303, P.U.R. 1925C, 228, 201 N. W. 241. Public utilities, however, are subject to the statutes administered by this Commission.

[1] In this situation, common

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sense dictates that some rules be established whereby this competition in rural areas may take place on a fair plane of equality. The Commission believes this is in the public interest. We hold no brief for or against any agency in this competitive struggle. Our primary concern is in seeing that the maximum number of farmers get service at the lowest cost consistent with the requirements for adequate and continuous service. We feel that the agency which should serve, assuming minimum requirements of service standards, financial responsibility, etc., are met, is largely a matter of choice with the farmers themselves, as long as wasteful competition or duplication of facilities will not result. The Commission has steadfastly adhered to, and repeatedly expressed, this view, both formally and informally.

To attain this objective of an orderly development of rural electrification, some rules and procedure are necessary. Since this Commission is the only agency having any jurisdiction over any of these competing agencies, we have established and propose to continue certain rules which, within our legal powers, are designed to promote orderly procedure and to prevent unregulated and wasteful competition.

The situation confronting us is new. It calls for some untried remedies. We do not hesitate to call them experiments. But also the circumstances change rapidly. Such rules as are established must therefore be flexible and subject to change as experience accumulates. For this reason our order will again be temporary so that the matter can be re-

examined after an appropriate interval.

[2] We turn now to the more strictly legal basis of our orders.

In briefs filed by the utilities attention is called to the provisions of § 196.49 where specific mention is made of certain grounds for withholding approval of plant extensions. These are quoted below:

"The Commission may refuse such certificate if it appears that the completion of such project (a) will substantially impair the efficiency of the service of such public utility; (b) provides facilities unreasonably in excess of the probable future requirements; or (c) will, when placed in operation, add to the cost of service without proportionately increasing the value or available quantity thereof . . ." (Section 196.49 (4)).

It is argued that the Commission's order must be supported by specific findings in accordance with the above specific provisions.

In the Commission's opinion, the orders of March 20th, *supra*, and in the present proceeding are amply supported by the statutes. If it be necessary to make findings in accordance with § 196.49, we point out that the order herein will have the effect of preventing the expansion of electric lines and equipment beyond the needs of the service in a particular area and that it will also have the effect of preventing other customers of utilities from having to make good losses incident to uneconomic expansion into areas where adequate service by other agencies is in reasonable prospect, or where service cannot be furnished by the utility without investments ex-

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ceeding reasonable limits for new customers.

But in addition we invite attention to other provisions of the statutes which authorize the Commission to issue orders and make regulations which in its opinion are necessary for the orderly conduct of utility operations and which give the Commission concurrent jurisdiction with municipalities in controlling extensions of service. When the public utility statutes are read as a whole, they evidence a legislative policy of giving the Commission broad authority to regulate utilities so as to accomplish an orderly development of utility service, without wasteful territorial competition and duplication, except where no other remedy than competition is feasible. These powers are additional to those involved in prescribing reasonable and nondiscriminatory rates, rules, and regulations and other functions associated therewith.

We do not believe a strict construction of the statutes is warranted by the circumstances confronting us. We believe that the orders in this docket are appropriate and reasonable means toward a reasonable goal and that they are fully warranted under the public utility statutes.

Since the order of March 20, 1936, *supra*, several changes have taken place which warrant consideration. The Congress of the United States, with the approval of the President on May 21, 1936, has authorized a 10-year program of rural electrification under the Federal Rural Electrification Administration. By this law Federal activities in this field have been placed on a definite, instead of temporary, basis. Federal funds have

been appropriated for a 2-year period.

Activities in this state in the promotion of rural electric cooperative associations and other REA projects have become more definitely known. The Commission is informed that 17 such cooperative associations have been formed, in addition to a cooperative service organization designed to assist the local associations in getting started and in operating their projects. The progress made in developing these projects is indicated in the following tabulation as of August 14, 1936:

Number of rural electric cooperative associations which have filed articles of incorporation	17
Number of projects submitted to the Federal Rural Electrification Administration*	20
Number of projects for which allotments of Federal funds have been made**	13
Estimated miles of line	2,541
Estimated number of prospective users	8,087
Number of cooperative associations which have signed loan contracts with REA	2
Number of cooperative projects on which construction contracts have been awarded	2
Estimated miles of line	475
Estimated number of customers	1,553

* Includes three projects proposed by municipal or private utilities.

** Includes two projects for 82 miles and 275 prospects, proposed by utilities.

In addition, we are informed that a number of cooperative associations are in process of formation but have not yet completed formal organization. The Rural Electrification Coordination Committee states that it cannot give an accurate, complete list of such embryo associations nor of the areas where such activity is being carried on.

The above data indicate that a substantial part of the rural public is interested in obtaining electric service and that a significant number have evidenced interest in obtaining such

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service from a cooperative association.

The Commission has now had about five months' experience with the operation of its order of March 20th, *supra*. A brief review of this experience is given below.

The following tables summarize activities under the order of March 20th:

TABLE I

Status of Applications for Extensions under Rules 1 and 4 of 2-U-965

Total applications filed	106
No objection raised	92
Objection raised	14
Application withdrawn after objection ...	1
Orders issued	6
Formal cases pending	7

TABLE II

Classification of Applications for Blanket Exemption from Provisions of 2-U-965 under Rule 5(c)¹

Number of applications	3
Number of hearings held	3
Number of orders issued	3
Number of towns wholly exempted	173
Number of towns not exempted, in whole or in part	27

¹ The only application for exemption under Rule 5(a) was withdrawn prior to hearing. There were no applications under Rule 5(b).

tomers, or 17 per cent of the total involved in the applications were affected by the delays incident to formal proceedings. We also note that most of the applications were for extensions of 3 miles or less.

At the hearing on August 1st, a chart was presented by the utilities showing the approximate number of rural customers connected annually during the past twelve years and giving an estimate of the number expected to be connected during 1936. These figures, read from the chart, are tabulated below:

1924	730	1931	3,025
1925	1,100	1932	375
1926	1,700	1933	570
1927	5,100	1934	470
1928	7,550	1935	1,200
1929	6,350	1936	5,000*
1930	4,550		

* Estimated.

The above data were cited in support of the contention that the utilities were actually connecting more customers than had any cooperative associations and hence that the rules

TABLE III

Classification of Applications for Extensions under Rules 1 and 4¹ of General Order 2-U-965

Length of Extension Miles	Number of Applications	Number of Objections	% Objections	Total Mileage	Mileage Affected By Objections	Per Cent of Total Mileage Affected By Objections	Total Customers*	Customers Affected By Objections	Per Cent of Total Customers Affected By Objections
1 but not over 2	47	1	2.1	72.41	1.33	1.8	285	4	1.4
2 but not over 3	26	3	11.5	65.82	7.10	10.8	212	24	11.3
3 but not over 4	11	3	27.3	38.25	10.80	28.2	115	36	31.3
4 but not over 5	5	1	20.0	22.90	4.50	19.7	76	11	14.5
Over 5	16	5	31.3	200.13	40.68	20.3	557	137	24.6
Total	105	13	12.4	399.51	64.41	16.1	1,245	212	17.0

¹ Does not include one application involving 43 miles of line and approximately 50 contracting customers, which was withdrawn after objection.

* Reflects only those who have signed contracts at time application was made. Estimated in some instances.

It is noteworthy that of the applications filed under Rules 1 and 4, only 13, or 12.4 per cent were objected to. Approximately 212 cus-

established in our order of March 20th, *supra*, were delaying rural electrification rather than helping.

While these figures show a prom-

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ising spurt in rural electrification, they are not determinative of the issues involved. There seems to be, nevertheless, a considerable part of the rural public who have expressed interest in receiving electric service from other agencies. This group should not be cast aside and ignored. They are entitled to consideration. These rival groups create the problems with which we must deal.

At the hearings in these cases, the underlying controversy centered largely on the question whether granting the utility's application would weaken the economic basis of the coöperative project and thus postpone the ultimate extension of service over a wider area. This is the old question whether the thickly settled portion of a rural area should help support electric extensions to the thinly settled sections. Should the "cream" and the "skimmed milk" be mixed? As might be expected, opinions differ on this question. Even among the farmers themselves, some desire service immediately without waiting for development of an extension over a wider area, including farmers less favorably situated. In such cases the Commission has tried to ascertain the majority local sentiment and to work out a plan for wider extensions of service. Where a utility's extension rules and rates are adapted to the making of extensions on a project basis, such a procedure can and has been worked out. It has been the basis for adjusting certain cases in which objection was at first registered to the proposed extension.

[3-5] The experience of the Commission in these cases indicates the point where limitations on the un-

trammelled right to make rural extensions should be applied, in the interest of an economic and widespread development of rural electric service. Our conclusion is that up to the point where a coöperative association is formed, and a loan contract signed, there should be an open opportunity to solicit customers and bring to them the information necessary to a choice of how and when electric service can be obtained. However, when a duly organized coöperative association has laid out a project, and has signed a loan contract, it appears uneconomic to authorize additional construction by any other agency, without good cause shown, at least until the costs and conditions of service by the coöperative are definitely known. On the other hand, where plans for a coöperative have not reached this stage and where an existing utility has projected an extension to reach bona fide applicants for service, denial of the privilege of construction by the utility, except for compelling reasons duly shown, appears unwarranted. We believe that rules regulating competition between the rival agencies which are consistent with the above policy are justifiable under the statutes as well as by equity.

In view of the above considerations, the Commission herein will extend the order of March 20th, *supra*, for a further period of ten months but will make certain modifications, which are summarized below. The first change in Rule 1 is to require all extensions of primary line to be submitted to the Commission where a duly organized coöperative association or other agency has filed with the Commission a definite project to

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which a clear majority of those affected have assented and for which funds to commence construction are assured. It is further provided that this restriction, so far as it relates to projects filed by a coöperative or similar agency, will automatically lapse if within six months of such filing of a project the association has not further filed a contract for construction.

The purpose of this modification is to prevent extensions of lines into a definite area projected by a competing agency which has reached a stage of development where there is a reasonable prospect that duplicate lines might be constructed unless some restraint were imposed. The lapse of this restriction if a construction contract is not filed within six months is intended to reopen the area in question to development. This is on the assumption that six months should be a reasonable period for a newly organized agency with a financing contract to bring its plans to the stage of a contract for construction work. While it is true that we have no jurisdiction to require nonutility agencies to file their projects, it appears to be to their advantage, as well as in the interest of orderly procedure, for them to do so. The Commission hereby asks their coöperation in this regard and further requests that enough copies of maps showing the scope of the project be filed to permit sending one copy of this map to each utility affected. In this manner the utility will be informed of the restricted zone.

[6] The second modification raises the exempted length of line extension from 1 mile to 3 miles, but at the same time removes this exemption if

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the proposed line is merely added to a previously exempt extension. Briefly, if a utility desires to make only one primary extension of 3 miles or less, it need not apply to the Commission. However, if this is one link in a chain of short, exempt extensions, application shall be made to the Commission.

The reason for this change is clear. The Commission has received complaints against chain extensions being resorted to by utilities to circumvent the procedure required in our order of March 20th, *supra*. Hence, we have designed a rule intended to require a review of such chain extensions on their merits.

A few utilities have applied for exemptions under Rule 5. Our experience does not indicate the need for any change therein. This rule provides a method whereby delays may be avoided if the utility can meet certain requirements of a systematic and economical development of rural service.

Both before and since our order of March 20th, *supra*, we have received a number of letters from groups of farmers interested in forming coöperative associations asking the Commission to prevent utilities from soliciting customers among actual or prospective coöperative members. The Commission can only repeat what was said on this subject in our opinion of March 20th (14 P.U.R.(N.S.) at p. 29):

"We have observed that the most serious difficulty with which the coöperative associations have had to contend has been the solicitation of its members or prospective members by utilities serving in the same territory. The economic forces of competition

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have made such solicitation successful or at least partially successful only in those areas where the service and rates of the utility were at least on a par with the rates and service which the potential users had been led to believe they could secure from the coöperative association. We know of no statutory power by which the Commission could prohibit such competitive solicitation. We repeat that the potential users should be entitled to exercise their privilege of choosing the responsible agency from which they desire to receive service. The Commission stands ready and willing, as it has in the past, to give potential users such information as it possesses to assist them."

Based upon analysis of the foregoing facts and considerations the Commission finds that an orderly and economic development of rural electrification will best be promoted by the issuance of the following order.

It is therefore *ordered*, that the following amended rules be and are hereby substituted for the provisions contained in General Order 2-U-965, dated March 20, 1936, *supra*, in so far as extensions of electric utilities in towns are concerned:

Rule. 1. Transmission and Distribution Lines.

Unless and until compliance has been made with Rule 4 hereof, no electric utility shall construct or place in operation any line for the transmission or distribution of electrical energy in any town or clearly defined portion of a town or in any town or towns where service is proposed by a duly organized coöperative association or other agency which has filed

with the Commission (1) a map showing the area proposed to be served, (2) a statement showing that a majority of the prospective customers in the area are included in the project, and (3) a duly executed loan contract for securing funds for construction, except that in any town or clearly defined portion of a town in which said utility was operating as of the date of this order, and in which no coöperative or other project has been filed as set forth above, the extension of secondary lines of approximately 220 volts or less or 3 continuous miles of primary line in a specific location which do not constitute an extension of a previous extension of 3 miles or less built after March 20, 1936, and which will serve not less than six applicants who have contracted for service or a proportional distance for one applicant, shall be exempt from this order. If within six months of the date of filing a project hereunder, the coöperative association or other agency has not filed a construction contract, the exemption of single line extensions of 3 miles or less, not in a chain of such extensions, shall again be operative.

Rule 2. Definitions.

(a) The term "electric utility" as used in this order means and embraces every corporation, company, individual, association, their lessees, trustees, or receivers appointed by any court, and every town, village, city, or power district that may own, operate, manage, or control any plant or equipment within the state for the generation, transmission, distribution, delivery, or furnishing of electric energy, directly or indirectly, to or for

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the public. (b) The terms "line" or "lines" shall mean any wire circuit or circuits over which electrical energy may be transmitted or distributed. It shall include poles, towers, or other structures upon which such wire circuit or circuits are carried, any underground or submarine construction for carrying such circuit or circuits, and also land, easements, or other rights of occupancy or use requisite for the construction and operation of such wire circuit or circuits. (c) The term "clearly defined portion of a town" shall mean a part of a town that is definitely described in an agreement heretofore entered into between electric utilities, or in any decision or order of a public authority having jurisdiction in the premises that confers or limits the operative rights of an electric utility operating in the town.

Rule 3. Conditions in Orders.

The Commission in the issuance of certificates may find it in the public interest that such certificates be issued upon conditions. Any certificates thus issued subject to conditions must be accepted with the conditions attached.

Note—If any utility deems the conditions imposed in the certificate to be unreasonable, illegal, or improper, its remedy is to request a hearing or rehearing at which such objections may be pointed out, and if the objectionable features are not stricken out by the Commission, then an appeal may be taken.

Rule 4. Procedure.

(a) Any electric utility desiring to extend its lines into a town or a "clearly defined portion of a town"

in which it was not serving as of the date of this order, shall file with the secretary of the Commission in triplicate an application for a certificate of authority and shall set out such information as will convey a full understanding of the circumstances surrounding and the reasons justifying the proposed construction. The Commission reserves the right to call for such additional information as it may deem necessary.

(b) Any electric utility desiring to make an extension not specifically exempted in Rule 1, of this order, into a town or "clearly defined portion of a town" in which it was already serving exclusively as of the date of this order, shall file with the secretary of the Commission a notice and brief description of the proposed extension. Concurrently with the filing of the notice to the Commission, the utility shall file the same notice with the town clerk of the towns in which such extension is proposed. The Commission shall immediately notify such parties as appear to have an interest in said extension including the Rural Electrification Coördination Director. If no objection to said extension is filed with the Commission within ten days of receipt of the notice by the Commission and if the proposed extension appears to meet the requirements of the Commission, then the extension may be made without further notice. If objection is filed with the Commission or if the Commission deems necessary an investigation on its own motion, a hearing shall be ordered and a certificate of authority granted or denied in accordance with the showing of public convenience and necessity. The Commission will also

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immediately notify the utilities affected when a project or construction contract has been filed in accordance with Rule 1.

Rule 5. Provisions for Exemption.

In order to minimize possible delays in extending rural lines by existing utilities in areas already so developed as to make another agency of supply uneconomical or in areas where no conflicts of interest exist or where projects have been submitted to the state coördinator, a procedure for securing exemption from the order herein is set forth below. It should be understood that where the order in this docket is not applicable the order in 2-U-20, as last amended July 20, 1934, is still effective.

Upon application to the Commission, exemptions of particular areas from the order herein may be granted to utilities meeting one or more of the following requirements; after findings and order that such exemption is consistent with public convenience and necessity.

(a) Subject to review and acceptance by the Commission, the utility may file a memorandum of agreement with an organized group, committee, or association of potential farm users of electricity, desiring retail electric service through some other distributing agency; this agreement shall designate certain defined areas for solicitation of customers and building rural lines by the utility, and group, or association, which agreement satisfies the Commission

that an economical and orderly development of rural electric service in the public interest will be served thereby. Such memorandum of agreement shall be signed by the responsible representatives of the utility and farm group, committee, or association involved.

(b) The utility may file maps or other satisfactory evidence showing that in a town, or clearly defined portion of a town, already occupied by the utility, it is already serving over 50 per cent of the total rural service locations and no compact, unserved area of said town, which is accessible to another distributing agency, remains.

(c) Subject to review and acceptance by the Commission, the utility may file a revised rural extension rule (a) that is not discriminatory against present customers served, (b) that provides for the utility financing at its own expense extensions which would give adequate service, and (c) that the new extension rule requires assured revenue of not more than \$144 per mile per year including 1,800 kilowatt hours per year.

Rule 6. Effective Date.

This order shall for a temporary period ending July 1, 1937, apply to all extensions made or proposed to be made after September 1, 1936.

It is *further ordered*, that jurisdiction is hereby retained in this proceeding to make such alterations or amendments of this order as may appear necessary and reasonable in the premises.

Village of Boonville
v.
Milo R. Maltbie et al.

(272 N. Y. 40, 4 N. E. (2d) 209.)

Return, § 18 — Right to allowance — Municipal plant.

A municipality operating an electric plant is entitled to a return on the value of the property owned and used and useful in the public service.

Commissions, § 17 — Jurisdiction — Statutory restrictions.

Statement by New York court that the Public Service Commission may exercise only such powers as are conferred by the legislature, p. 379.

Rates, § 428 — Municipal plants.

Statement by New York court that the Commission may only interfere with rates fixed by a municipality for its electric plant when the rates are unjust and unreasonable, p. 380.

Municipal plants, § 19 — Powers of Commission — Rates.

Statement by New York court that the statute imposes a duty on the Commission to supervise rates for the same reason in the case of a municipally owned utility as in the case of a privately owned utility, namely, to prevent the fixing of rates that are unjust and unreasonable, p. 380.

(CRANE, C. J., and LOUGHRAN, J., concur in separate opinion.)

[October 6, 1936.]

APPPEAL from order of appellate division annulling Commission order fixing rates for a municipal electric plant; question certified to court answered in the negative, thereby sustaining order of lower court. For lower court decision see 245 App. Div. 468, 14 P.U.R.(N.S.) 93, 283 N. Y. Supp. 460.

APPEARANCES: Sherman C. Ward, Acting Counsel, Public Service Commission; Andrews, Andrews & McBride (Paul Shipmen Andrews, of counsel), for respondent.

FINCH, J.: The Public Service Commission appeals from an order of the appellate division, third judicial department, annulling by a divided 15 P.U.R.(N.S.)

court a determination and order of the Public Service Commission fixing the rates to be charged by the municipal lighting plant of the village of Boonville within the village and in adjacent territory. The appellate division granted leave to appeal to this court and certified the following question: "Did the Public Service Commission in its determination fixing rates in

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this proceeding properly decide that as a matter of law such rates should not include a return on the value of the property owned by the village and used and useful in the public service?"

Upon this appeal the facts are not in dispute. The Public Service Commission in two opinions specifically refused to make any determination as to the present value of the Boonville electric plant and fixed rates designed to produce no return as such upon any valuation. The single question presented to the appellate division was whether the Public Service Commission as a matter of law could legally deny any return on the value of the property owned by the village, used and useful in the public service in providing electricity.

The Public Service Commission made certain findings of fact which are not questioned upon this appeal. In brief the determination of the Commission was aimed to produce rates which, although not permitting any return to the village on the value of the property, were sufficient to cover all operating expenses and costs, including an amount considered ample for any service provided by municipal officers or employees and the value of all supplies and office space furnished by the village. Also an allowance was made for uncollectible bills and an amount estimated to be equal to all taxes which would have been paid to the village by a private plant of the same extent and character as the municipal plant. In addition there was an allowance to compensate the taxpayers of the village for the risk in the construction of the plant, particularly as to that part of the plant which lies outside the municipal limits and

an amount allegedly sufficient for renewals or minor extensions so as to "avoid the necessity of repeated small issues of securities." In short the Commission claimed that the rates fixed were sufficient not only to produce sums equal to all necessary expenses but to permit in addition a return of approximately \$3,400 annually over this amount to take care of unforeseen contingencies.

A short history of the Boonville municipal lighting plant is pertinent.

In 1901, the voters of the village of Boonville adopted a proposition for the construction of a municipal lighting plant. In 1903, village bonds in the sum of \$45,000 were sold and the lighting plant was constructed from the proceeds to furnish service both to residents and business in the village. Originally the village plant generated all the electrical energy needed but with the growth of the demand this plant proved inadequate and arrangements were made to purchase additional current from another utility company. Shortly after the establishment of the village lighting system there arose a considerable demand for service from persons residing in adjacent towns. To provide this service rural lines were constructed by the village until the latter now owns and operates 78 miles of distribution wires outside the village.

From the first and continuously thereafter the electric plant has been a financial success. The original bond issue was completely retired and no other issue has been necessary. All extensions and improvements have been paid for from operating profits or by short term loans which have been completely repaid from operating

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profits. Since 1931 the village has had outstanding no lighting plant securities. In addition to retiring the original bond issue and financing all improvements and extensions to the plant, the profits have enabled the village to accumulate by 1934 a surplus of \$249,000 and a fixed capital account of \$220,088, besides turning over to the general village fund for the expenses of the village \$5,000 in each of the last two fiscal years. In addition to these earnings the village for the last five years has provided free both municipal service and street lighting.

In 1932, two bodies of consumers, one living within the village and the other outside the village, filed complaints against the village with the Public Service Commission seeking to reduce the cost of electric service to consumers claiming that the village when it undertook to render this essential service for the benefit of its inhabitants had been restricted by the legislature so that as a matter of law it could not charge a rate, however reasonable as a matter of fact, which would be sufficient to include any return, however small, on the value of the property owned by the village and used and useful in the public service.

These two sets of complaints filed with the Public Service Commission were consolidated into this one proceeding. Hearings in the consolidated case were had at various times over a period of three years. During these hearings the village offered to show that the revenue received during the year ending September 30, 1934, from its municipal lighting plant would equal a return of 6.1 per cent upon its original cost and 4.1 per cent on a re-

production cost basis. The village also offered to show cost of reproduction new less depreciation of the plant, going concern value, and fair and reasonable value. This evidence the Commission refused to receive. In 1934, the Commission wrote an opinion and a further opinion in 1935 holding in substance that the village was restricted by law to furnishing electricity at cost to consumers and that no return as such may be earned upon the value of the property used in furnishing this service. In its opinion dated March 2, 1935 (8 P.U.R. (N.S.) 493, 498), the Commission said:

"The profit motive should not enter into the consideration. . . . It is believed that a just and reasonable rate to be charged for electricity by a municipal plant should be based strictly upon actual costs, including proper and necessary reserves. . . . Again, the Commission believes that the making of rates for municipalities should not be encumbered with all the proof as to reproduction cost and the many imaginary and conjectural elements that have been presented to regulatory bodies making rates for private companies."

The Commission further held that it was against sound public policy to permit a municipality to accumulate profit over and above suitable reserves so that such profit might be used to relieve the general tax burden or to promote other municipal projects. The interest of the consumer, so held the Commission, must be paramount to all other interests.

Thereafter, the Commission, by order, imposed upon the village a lower schedule of rates. Application was

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made to the Commission for a rehearing but it was denied. The village then obtained an order of certiorari to review the proceedings of the Public Service Commission.

The appellate division, third department, as noted, annulled the order and remitted the matter to the Commission, 245 App. Div. 468, 14 P.U.R. (N. S.) 93, 283 N. Y. Supp. 460.

The village contends that the Public Service Commission in taking the position that a municipally owned and operated plant must operate at cost and may not earn a profit as such on the value of the property used and useful in the public service has exceeded the powers granted to the Commission by the legislature and has deprived the village of its property without due process of law in contravention of the provisions of the state and Federal constitutions.

We note that the village owns and operates its lighting plant in its proprietary as contrasted with its governmental capacity, but is unnecessary to consider the effect, if any, of this distinction. We reserve any questions which may arise under the state or Federal constitutions since the case at bar turns solely on the construction to be given to the Public Service Commission Law. More specifically the question presented here is whether the legislature has conferred upon the Public Service Commission power and authority to determine as a matter of policy whether rates charged by a municipally owned plant should include any return on the value of the property owned by the village and used and useful in the public service. In other words, is a rate fixed by a municipally owned utility unreasonable solely be-

cause it includes in addition to all unnecessary operating expenses and an amount for reserves and depreciation, a return by way of profit upon the reasonable value of the property used in the public service?

Apparently this question has never been adjudicated by the courts of this state, although many other jurisdictions have held that a return by way of profit may be obtained.

In the consideration of the powers granted to the Public Service Commission we start with the settled principle that the Commission may exercise only such powers as are conferred upon it by the legislature. People ex rel. Municipal Gas Co. v. Public Service Commission, 224 N. Y. 156, 165, P.U.R.1918F, 781, 120 N. E. 132.

The power of the Commission with reference to rates charged for electricity by the village of Boonville is found in the Public Service Commission Law, Art. 24, § 66 subd. 5: "Whenever the Commission shall be of opinion . . . that the rates . . . of any such person, corporation, or municipality are unjust, unreasonable . . . the Commission shall determine . . . in the manner provided by and subject to the provisions of § 72 of this chapter the just and reasonable rates . . . thereafter to be in force for the service to be furnished." Section 72 of said law provides, in part: ". . . In determining the price to be charged for . . . electricity the Commission may consider all facts . . . with due regard among other things to a reasonable average return upon capital actually expended and to the necessity of making reservations out of income for surplus and contingencies." Section

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364 of the General Municipal Law provides: ". . . all of the provisions of . . . the public service law, so far as the same are applicable, shall apply to a municipal corporation."

The village of Boonville concedes jurisdiction of the Public Service Commission to regulate rates charged by it for electricity so as to prevent unreasonable rates. Even without this concession, the right to regulate utility rates against unreasonable and unjust charges is a power vested in the state and may be delegated to the Public Service Commission. *Saratoga Springs v. Saratoga Gas, E. L. & Power Co.* (1908) 191 N. Y. 123, 83 N. E. 693, 18 L.R.A.(N.S.) 713, 14 Ann. Cas. 606.

It is elementary that privately owned utilities must be allowed a fair return on the value of their property used and useful in the public service. *Smyth v. Ames* (1898) 169 U. S. 466, 42 L. ed. 819, 18 S. Ct. 418; *Municipal Gas Co. v. Public Service Commission*, 225 N. Y. 89, P.U.R. 1919C, 364, 121 N. E. 772; *Minnesota Rate Cases* (1913) 230 U. S. 352, 57 L. ed. 1511, 33 S. Ct. 729, 48 L.R.A.(N.S.) 1151, Ann. Cas. 1916A, 18.

The state has authorized villages to establish electric light plants (Village Law, Art. 10) and has given to the villages the power in the first instance to fix rates (Village Law, § 246). The Public Service Commission may only interfere when the rates so established are unjust or unreasonable (Public Service Commission Law, § 66, subdivision 5). The statute imposes a duty on the Public Serv-

ice Commission to supervise rates for the same reason in the case of a municipally owned utility as in the case of a privately owned utility, namely, to prevent the fixing of rates that are unjust and unreasonable. Also the statute provides that the rate must be fixed by the Public Service Commission in each instance ". . . with due regard, among other things, to a reasonable average return upon capital actually expended and to the necessity of making reservations out of income for surplus and contingencies." These words of the statute negative the claim of the Public Service Commission that in the case of a municipality it may disregard entirely any return on capital actually expended. The Public Service Commission justifies its action because the municipality has paid back the capital which it borrowed. But if a privately owned utility had paid off its indebtedness, it would still be entitled to a fair return upon the value of the property. In the absence of any statutory prohibition a municipally owned electric plant may not be penalized for its thrift in putting back as invested capital all or a portion of its earnings. Nothing in the statute authorizes the Public Service Commission to treat differently a privately owned and a municipally owned utility so as to allow the former a reasonable profit and the latter no profit. If power is given to the Public Service Commission to deny any return by way of profit to a municipally owned utility, such authority must be found in the statute. Yet not only do we find no attempt by the legislature to state a different rule, but, on the contrary, identical language is used as to each class of utility.

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We are only in a position now to determine upon this record that there must be allowed some return to the municipality upon the value of its electric plant used and useful in the public service. The rate of return and the method of arriving at this value we leave in the first instance to the Public Service Commission as the expert fact finding body. Upon this record before us the sole issue is whether or not any return at all should be allowed, and the facts have been collated and presented with this issue solely in view. Upon this data and this record the Public Service Commission has decided that as between no return by

way of profit and some return, as a matter of law no return should be allowed. The issue should not have been between no return and some return, but what is a reasonable return to the municipality. A court obviously is not equipped to collate the necessary data and facts upon these issues and therefore the matter must be remitted to the Public Service Commission.

The order should be affirmed, with costs, and the question certified answered in the negative.

Crane, C. J., concurs in result in separate opinion in which Loughran, J., concurs.

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Re Nelson Telephone Company

[2-SB-71.]

Security issues, § 49 — Grounds for disapproval — Inadequate income.

Authority to issue serial bonds for the purpose of paying outstanding indebtedness should not be granted when prospective revenues will be insufficient to meet the fixed charges, including interest on present obligations, interest on the bonds, and an appropriation for bond retirement.

[September 30, 1936.]

APPPLICATION by telephone company for authority to issue bonds; application denied.

By the COMMISSION: The application in the above-entitled matter was filed with the Commission on August 17, 1936, and requests, in substance, authority to issue \$5,000 principal amount of 5 per cent bonds for cash at a discount of 5 per cent for the purpose of paying outstanding indebtedness, consisting of notes and accounts payable, amounting to \$4,724.95.

The company proposes to issue these bonds as of December 1, 1936, and to have them mature serially as follows:

\$300 per year for the first 2 years,
\$400 per year for the next 6 years,
\$500 per year for the next 4 years.

With the application, the petitioner submitted its balance sheet as of December 31, 1935, and its income statement for the year ended December 31,

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1935. The balance sheet is shown below as Table I:

TABLE I

<i>Assets</i>	
Property and plant	\$18,750.55
Cash	10.72
Notes and bills receivable	417.84
Accounts receivable	840.65
Total	\$20,019.76
<i>Liabilities</i>	
Common stock	\$6,000.00
Mortgage on residence real estate	3,500.00
Depreciation reserve	3,731.70
Notes and bills payable	4,035.00
Accounts payable	689.95
Taxes accrued	82.91
Interest accrued	250.00
Surplus	1,730.20
Total	\$20,019.76

The income statement for the year ended December 31, 1935, and a comparison with the two previous years is shown in condensed form in Table II:

TABLE II

	1933	1934	1935
Operating revenues	\$3,422.65	\$3,328.68	\$3,321.49
Operating expenses	\$1,878.57	\$1,856.12	\$1,784.00
Depreciation expense	780.00	780.00	780.00
Tax expense	158.99	156.88	201.08
Total operating expense	\$2,817.56	\$2,793.00	\$2,765.08
Net operating revenue	\$605.09	\$535.68	\$556.41
Non-operating revenue	40.80
Gross income	\$605.09	\$535.68	\$597.21
Interest on mortgage	\$175.00	\$175.00	\$175.00
Interest on floating debt	251.00	245.00	303.60
Total interest deductions	\$426.00	\$420.00	\$478.60
Net income	\$179.09	\$115.68	\$118.61

The petitioner now has authority to issue \$4,000 of common stock in addition to the \$6,000 of common stock shown as outstanding in the above balance sheet. This \$4,000 of authorized, but unissued, common stock was

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authorized to be sold for cash for the purpose of paying outstanding indebtedness.

In the pending application, the company states, in part, that it has not had sufficient earnings to pay dividends on its common stock, that, for this reason, the additional \$4,000 of common stock was not issued, and that it would be willing to have the authorization for the issuance of said \$4,000 of common stock withdrawn. In other words, the company desires to cancel the authority to issue \$4,000 of common stock and to issue \$5,000 of bonds in lieu thereof when it admits that there are insufficient earnings to pay common stock dividends.

Under the pending proposal, the company would have the following

fixed charges averaging \$737.92 per year:

Annual interest on mortgage	\$175.00
Average interest charge on \$5,000 of bonds over a period of 12 years ...	146.25
Average annual retirement of principal amount of bonds over 12 years	416.67
Total	\$737.92

RE NELSON TELEPHONE CO.

A study of the financial statements of the company indicates that it would not have available depreciation reserve funds to retire the principal amount of bonds and that, therefore, these retirements must result in additional charges to income.

The total operating revenues have been steadily declining for the past five years and there is nothing in the record now before us to indicate that the revenues will show an increase; but, assuming that the revenues will not be reduced below the amount shown in Table II, the granting of the authority, as requested in the pending application, would result in a deficit as shown in the following income statement for 1935:

TABLE III

Total operating revenues	\$3,321.49
Total operating expenses	2,765.08
Net operating revenues	\$556.41
Non-operating revenues	40.80
Gross income	\$597.21
Interest on mortgage	\$175.00
Interest on \$5,000 of bonds (average)	146.25
Appropriation to sinking fund to retire bonds (average)	416.67
Total deductions from gross income	\$737.92
Net deficit	(\$140.71)

Under the provisions of § 184.06 of the Wisconsin Statutes, the Commission is required to find that the financial condition, plan of operation, and proposed undertakings of the corporation will afford reasonable protection to purchasers of the securities to be issued before a certificate of authority may be issued. In view of the facts now before us, the Commission cannot find that reasonable pro-

tection will be afforded to the purchasers of the \$5,000 of bonds, authority for the issuance of which is requested by petitioner, when the proposal will result in annual deficits as shown above. In fact, the income accounts of the company for the past five years show that it never had sufficient income to provide for the fixed charges attendant upon the issuance of these bonds. It follows, therefore, that the pending application should be denied.

This leaves for consideration the claim that the company cannot issue additional common stock to secure funds for the purpose of paying these obligations because there were insufficient earnings to pay dividends on said common stock. The company does not state what it considers to be sufficient earnings. The financial reports of the company indicate that if the company had sold the \$4,000 of additional common stock, it would have had earnings sufficient to pay the following dividends for the years indicated:

Year	Net Income	Dividend on \$10,000 of Common Stock
1935	\$422.21	4.22%
1934	360.68	3.60
1933	430.09	4.30
1932	387.53	3.87

It is true that these dividends would not be large, but it is equally true that if these dividends are not considered sufficient for common stockholders, the income is insufficient to pay the fixed charges on the bonds. It would appear fundamental that the Commission should not authorize the issuance of a senior security, especially, as in this case, when it is based on

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a less favorable showing and future prospects. In view of the facts now before us, the Commission finds and determines that the proposed issuance of bonds does not comply with the

provisions of Chap. 184 of the Statutes.

It is therefore *ordered*, that the application in the above-entitled matter be and the same is hereby denied.

FEDERAL POWER COMMISSION

Re Northern Pennsylvania Power Company et al.

[Order and Opinion No. 22, Docket No. IT-5000.]

Consolidation, merger, and sale, § 68 — Burden of proof.

1. The burden is upon the applicants to prove the facts necessary to support a finding by the Federal Power Commission that the sale of the property of one corporation to another, under § 203 of the Federal Power Act, will be consistent with the public interest, p. 387.

Consolidation, merger, and sale, § 19 — Public interest — Purposes of Federal Power Act.

2. The Federal Power Commission, in order to resolve the question of public interest on an application for approval of a sale of public utility property, must have recourse to the broad purposes of the Federal Power Act in determining the standard to be applied, p. 387.

Consolidation, merger, and sale, § 19 — Public interest — Elements considered.

3. The Commission, in acting upon an application under § 203 of the Federal Power Act for authority to sell public utility property, must take an over-all view of the various results which might follow the consummation of the transaction proposed—some results appearing to be affirmatively beneficial, some actually or potentially detrimental, while others may be inconsequential; and the Commission must weigh the good against the bad in order to be able to find either that the proposed transaction is consistent or inconsistent with the public interest, p. 388.

Consolidation, merger, and sale, § 33 — Grounds for disapproval — Withdrawal of liquid assets by parent company.

4. An application for authority to sell the property of a public utility corporation to another corporation under common ownership for a consideration consisting of cash and securities should be denied as not in the public interest, notwithstanding certain advantages which would result from the transaction, when the effect would be that the holding company would withdraw to itself the cash and securities from the liquid assets of an operating subsidiary without commensurate benefits to such subsidiary, p. 389.

[September 22, 1936.]

JOINT petition by electric utility corporation for approval of the sale of the property of one of such corporation to the other; denied.

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APPEARANCES: C. E. Paxson and Harold J. Ryan, for the applicants; Oswald Ryan, General Counsel, and Willard W. Gatchell and D. L. King, Attorneys for the Commission.

By the COMMISSION: The joint application of Northern Pennsylvania Power Company and Metropolitan Edison Company, applicants in the present proceeding, seeks an order of the Commission authorizing the sale of all the property of the former company to, and the assumption of all its existing obligations by, the latter company for a consideration of \$2,532,-040.09, as of April 30, 1935, such consideration to be adjusted upward or downward, according to fluctuations arising in the normal course of business, both as to assets and liabilities. The sum of \$1,537,911.80 is to be paid by Metropolitan Edison Company in cash, and the balance with adjustments is to be paid in 4½ per cent gold bonds of Associated Electric Company, refunding series due 1956, now owned by Metropolitan Edison Company. These bonds are to be taken at their average cost to Metropolitan Edison Company or at the market price thereof at date of closing of sale, whichever is the greater, with adjustment for accrued interest on such bonds.

The cash part of the consideration represents the proceeds of bonds sold by Metropolitan Edison Company in 1931. Such bonds were issued in part to cover expenditures already made for capital improvements, and in part for making specific additions and betterments to the company's property. By reason of the nation-wide business depression, however, the spec-

ified additions were not made, and the sum of \$1,537,518.44 of the proceeds of the bond issue was invested by the Metropolitan Edison Company in Associated Electric Company 4½ per cent bonds. In 1935, the Pennsylvania Public Service Commission ordered the company to turn such bonds back into cash and to maintain the sum realized therefrom, amounting to \$1,537,911.80, in a fund separate from its other cash and to make withdrawals therefrom only for the payment of the cost of new additions to the company's fixed capital, or for such other purpose as the Pennsylvania Public Service Commission might approve.

This Commission, in passing upon this application, does not purport to determine the propriety under the Pennsylvania law of including this cash item in the consideration. Nor has this Commission made any investigation as to the fairness or adequacy of the purchase price of \$2,532,-040.09 because in its opinion the application must be disposed of on grounds which make the amount of the consideration immaterial, and in which disposition it may be conceded for the purpose of argument only that the proposed consideration is fair and adequate.

A hearing was held in the matter on March 26, 27, and 28, 1936, before Trial Examiner Frank A. Hampton, at which extensive testimony was taken. Subsequently briefs were submitted by applicants and by counsel for the Commission. The Commission has carefully examined the entire record in this matter, including all the evidence introduced at the hearing, in arriving at its decision herein.

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The evidence at the hearing shows that Northern Pennsylvania Power Company is engaged in the business of generating, transmitting and distributing electric energy to consumers in the counties of Bradford, Lackawanna, Lycoming, Potter, Sullivan, Susquehanna, Tioga, Wayne, and Wyoming in north central and northeastern Pennsylvania; that through a long-term lease of the properties of its wholly owned subsidiary, Waverly Electric Light & Power Company, is also engaged in the business of supplying electricity at retail in the village of Waverly and vicinity in the state of New York; that this applicant sells approximately 30,000,000 kilowatt hours of electric energy annually but generates in its own plants only approximately 4,000,000 kilowatt hours, purchasing the remainder from affiliates; that it owns a steam generating plant at Towanda and small hydroelectric generating plants at Muncy, Tunkhannock, Oakland, and Lanesboro, Pennsylvania; that it is the owner of facilities for the transmission and distribution at retail of electricity within the state of Pennsylvania and has electric transmission and distribution lines over which it transmits electric energy to the lines which it operates as lessee within the state of New York for distribution within that state; that it purchases electric energy at wholesale at the New York-Pennsylvania state line from New York State Electric & Gas Corporation, an affiliated New York corporation, which energy the applicant transmits over its own transmission lines within the state of Pennsylvania for sale at retail to its consumers therein, and also for retransmis-

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sion into the state of New York for sale at retail to consumers in Waverly, New York, and vicinity; that this applicant also has interconnections with New York Central Electric Company and Elmira Light, Heat & Power Company, both affiliates; and that it has electric transmission lines crossing the New York-Pennsylvania state line.

The evidence also shows that Metropolitan Edison Company is engaged in the business of generating, manufacturing, purchasing, transmitting, distributing, selling, and supplying electricity and gas for lighting, heating, and industrial and general utility purposes and steam for steam heating; that it supplies electricity in the counties of Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Pipe, and York; that it supplies gas in the counties of Lancaster, Berks, and Northampton and steam heat in the city of Easton, Northampton county, all in the state of Pennsylvania; that it possesses large generating plants, its principal plants being located at Middletown, Pennsylvania, on the Susquehanna river, a steam plant, with a capacity of 60,000 kilowatts; another steam plant at Reading on the Schuylkill river, with a capacity of 69,000 kilowatts, and a third steam plant at Easton, Pennsylvania, on the Lehigh river with a capacity of 30,000 kilowatts; that it has also a hydroelectric plant on the Susquehanna river at York Haven, with a capacity of 19,000 kilowatts, and several small hydroelectric plants, including one on the Schuylkill river near Reading; one on the Lehigh canal at Easton and one at Stroudsburg; that the total gener-

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ating capacity of its plants is in the neighborhood of 172,000 kilowatts, with a peak load of approximately 110,000 kilowatts; that this applicant has a large high-tension transmission system which is interconnected with similar systems and plants of other operating public utilities within and without the state of Pennsylvania; that it sells electric energy in the state of Maryland at wholesale; and that the electric transmission lines of this applicant cross the state lines between the states of Pennsylvania and New Jersey and the states of Pennsylvania and Maryland.

Northern Pennsylvania Power Company, as of April 30, 1935, had issued and outstanding 22,130 shares of common stock without par value, all of which is owned by NY PA NJ Utilities Company, a holding company subsidiary of Associated Gas and Electric Corporation, which in turn is a holding subsidiary of Associated Gas and Electric Company. Its funded debt as of the same date amounted to \$4,004,000 of 5 per cent bonds of three series, having varying maturities. Metropolitan Edison Company as of April 30, 1935, had issued and outstanding 360,780 shares of common stock without par value, all of which was owned by NY PA NJ Utilities Company. It also had 5,734 shares of no par value prior preferred stock, \$7 dividend series, 91,802 shares of no par value prior preferred stock \$6 dividend series, 199 shares of no par value prior preferred stock \$5 dividend series, 11,518 shares of cumulative preferred stock \$7 dividend series, 95,886 shares of cumulative preferred stock \$6 dividend series, and 5,686 shares of cu-

mulative preferred stock \$5 dividend series. Most of the preferred stock is held by the public. Metropolitan Edison Company as of the same date had a funded debt of \$40,715,900, of which approximately \$11,000,000 has since been refunded or in the process of refunding at a lower interest rate.

[1] Applicants are before this Commission by virtue of the provisions of § 203 of the Federal Power Act, which requires Commission authorization for a transaction of this nature and which directs the Commission to approve the proposed transaction if the Commission finds that it "will be consistent with the public interest." The burden is upon the applicants to prove the facts necessary to support such finding. The Commission may grant any application in whole or in part and upon such terms and conditions as it finds necessary or appropriate to secure the maintenance of adequate service and the coördination in the public interest of facilities subject to the jurisdiction of the Commission.

[2] In considering application filed under § 203, the Commission, in order to resolve the question of public interest, must have recourse to the broad purposes of the Federal Power Act in determining the standards to be applied.

Such is the clear meaning of the language used by the Supreme Court in *Texas v. United States* (1934) 292 U. S. 522, 531, 78 L. ed. 1402, 54 S. Ct. 819, construing a section of the Interstate Commerce Act which provides as the condition of approval of proposed acquisitions of property a finding by the Interstate Commerce

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Commission that such acquisitions "will be consistent with the public interest." The court then said:

"The criterion to be applied by the Commission in the exercise of its authority to approve such transactions . . . is that of the controlling *public interest*. And that term as used in the statute is not a mere general reference to public welfare, but, as *shown by the context and purpose of the act*, 'has direct relation to adequacy of transportation service, to its essential conditions of economy and efficiency, and to appropriate provision and best use of transportation facilities.'" (Italics supplied.)

See also *New York Central Securities Corp. v. United States* (1932) 287 U. S. 12, 77 L. ed. 138, 53 S. Ct. 45.

The important part of the above-quoted language as it relates to this Commission's criteria for the finding to be made under § 203 (a) is not the discussion of the general divisions or subjects of the criteria the Interstate Commerce Commission may use to test the public interest under the Interstate Commerce Act, but is the statement as to how and from what source such criteria are properly ascertained. The court's language in the above case gives this Commission not the criteria, but the guide and method by which it may ascertain and set up those criteria, to wit, by reference to the context and purposes of the act. It may well be regarded that there are embraced within the purposes of the Public Utility Act of 1935, of which the Federal Power Act is an integral part, at least such matters as the securing of reasonable wholesale rates in interstate com-

merce, the prevention of unfair discrimination in wholesale rates and services in interstate commerce; the free flow of electric energy in interstate commerce; the honest and advantageous financing of public utilities; the protection of such public utilities from improper depletion of their assets by holding companies; the appropriate coördination of facilities in the interests of consumers and investors; the maintenance of adequate service; and the conservation of public utility assets so as to provide necessary additions and extension of facilities to meet the expanding needs of the public for electric energy, and thus accomplish the most effective use of the assets of operating companies for the public benefit.

[3] The Commission in acting upon an application under § 203 is called upon to weigh carefully the various results which might follow the consummation of the transaction proposed. Some results may appear to be affirmatively beneficial, some actually or potentially detrimental, while others may be inconsequential. The Commission must take an over-all view, weighing the good against the bad, in order to be able to find either that the proposed transaction is consistent or is inconsistent with the public interest.

In the present case, it may be conceded that the consolidation of the properties in question would effect some savings in bookkeeping, auditing, report making, and the like, and would accomplish a simplification of corporate and financial structures. Also, it appears from the record that if the Northern Pennsylvania properties were added to the Metropolitan

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Edison system, Metropolitan Edison Company would be able to refinance the funded debt against such properties at a substantial saving, assuming the continuance of a favorable market, although in this respect, there is no definite showing that the Northern Pennsylvania Company could not itself refinance its funded debt at a substantial saving.

[4] Balanced against the advantages which may flow from the proposed transaction is a feature which appears to the Commission to outweigh such benefits. If the transaction were approved, the effect would be that the holding company would withdraw to itself \$2,532,040.09 in cash and securities from the liquid assets of operating subsidiaries without *commensurate* benefits to such subsidiaries. NY PA NJ Utilities Company, by the proposed transaction, would have its current financial position improved to the extent of \$2,532,040.09 with a concurrent and equal impairment in the current position of its operating subsidiary, Metropolitan Edison Company. If the transaction were completed, NY PA NJ Utilities Company would own and control through one subsidiary, instead of two, precisely the same operating properties that it owned and controlled before and it would be en-

titled to the same total profits realized therefrom. The transaction cannot be dealt with upon the same basis as if the applicants were independent companies, and this Commission's duty in the present circumstances goes beyond a scrutiny to determine more fairness of price and effect upon efficiency and economy in operations.

Stripping the transaction of surface fictions and looking to the parties actually interested therein, the Commission readily identifies the real purchaser and real seller as NY PA NJ Utilities Company and recognizes the fact that this transaction will result in a transfer of current assets from a subsidiary to a parent company without the necessary compensating benefits to the former which the public interest demands.

Since the Commission, after careful examinations of the evidence of record, reaches the conclusion that the proposed transaction in its present form cannot be found to be consistent with the public interest, it is unnecessary to discuss in this opinion other elements entering into this consideration of public interest.

The application herein sought is, therefore, denied and order will issue in conformity with this opinion.

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Re Northern Pennsylvania Power
Company et al.

[Application Docket No. 33774.]

Valuation, § 98 — Accrued depreciation — Estimate or book reserve — Determination for purpose of sale — Consistency.

1. An estimate of accrued depreciation as set out in a reproduction cost estimate should not be used in determining liabilities which offset assets when the cost of the assets, as shown on the books, is used as a basis for determining purchase price, but the reserve for renewals and replacements as shown on the books, and which has been provided for by annual charges against operating expenses and surplus, should be used, p. 393.

Valuation, § 155 — Overheads — Electric utility.

2. An allowance of 19.1 per cent for construction overheads was held to be excessive for a reproduction cost estimate of the property of an electric utility company, and there was allowed instead 10.8 per cent of cost of physical property including 5 per cent for omissions and contingencies, p. 395.

Consolidation, merger, and sale, § 33 — Grounds for disapproval — Withdrawal of liquid assets by parent company.

3. A sale of the property of a public utility corporation to another corporation under common ownership for cash and securities, so that the parent company will receive the cash and securities representing the consideration, results in movements of property and cash and securities which are unnecessary for the purpose of effecting the consolidation and constitute an unnecessary draining by the holding company of the current assets of its subsidiary, p. 401.

[September 21, 1936.]

APPPLICATION for approval of sale of property and franchises by an electric utility corporation to an affiliated corporation; denied.

By the COMMISSION: The petitioners seek our approval of the sale of the franchises and all the property, real, personal, and mixed, of Northern Pennsylvania Power Company to Metropolitan Edison Company. The proposed sale is to be made in accordance with the provisions of § 23 of the General Corporation Act of

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April 29, 1874, P. L. 73, as amended by § 5 of the Act of April 17, 1876, P. L. 33, as amended by § 1 of the Act of June 2, 1915, P. L. 724, and in accordance with the terms of a purchase offer made May 28, 1935, by Metropolitan Edison Company, and accepted by Northern Pennsylvania Power Company on May 29, 1935.

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Metropolitan Edison Company proposes to assume all obligations of Northern Pennsylvania Power Company and pay to Northern Pennsylvania Power Company the sum of \$2,532,040.09, of which \$1,537,911.80 is to be in cash and the balance in securities, the purchase price to be adjusted for changes in the assets and liabilities resulting from the conduct of ordinary business from April 30, 1935, to date of settlement.

Our approval of the sale of the franchises and property is sought under Art. III, § 3 (c) and Art. V, §§ 18 and 19 of The Public Service Company Law, and of the transfer of the securities to Northern Pennsylvania Power Company under Art. III, § 11 (b) of that law, as amended. Our approval is also sought of the use, for the purpose of the purchase, of the sum of \$1,537,911.80 realized from the sale of certain securities as set forth in the Certificate of Notification (Serial No. 5807) filed with us October 6, 1931, and which sum we ordered impounded by our order of May 7, 1935, Application Docket No. 33705.

Northern Pennsylvania Power Company, to which letters patent were issued May 7, 1923, was formed by merger and consolidation of various electric companies under and by virtue of an act of the commonwealth of Pennsylvania, approved May 3, 1909, and has charter rights to furnish electricity to the public in the counties of Bradford, Lackawanna, Lycoming, Potter, Sullivan, Susquehanna, Tioga, Wayne, and Wyoming; and manufactured gas and steam heat service in the borough of Towanda, Bradford county. The

company also operates the Waverly Electric Company under lease and serves Waverly, lying partially within New York state.

Metropolitan Edison Company, to which letters patent were issued July 24, 1922, was formed by merger and consolidation of various electric companies under and by virtue of an act of the commonwealth of Pennsylvania, approved May 3, 1909, and has charter rights to furnish electricity to the public in the counties of Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Pike, and York; gas in the city of Easton and vicinity, Northampton county, borough of Pen Argyl and vicinity, Northampton county, borough of Hamburg and vicinity, Berks county, and borough of Elizabethtown and vicinity, Lancaster county; and steam heat in the city of Easton, Northampton county.

The petition sets forth that the sale of the franchises and property of Northern Pennsylvania Power Company to Metropolitan Edison Company is necessary and proper for the service, accommodation, and convenience of the public for these reasons; namely, (1) petitioners are affiliated companies and for some time past have been under the same management; (2) the combination of the properties and corporate organizations into one unit will result in the elimination of existing duplication and make for increased efficiency and economy in operations; (3) Metropolitan Edison Company is better able to finance improvements and extensions of the property of Northern Pennsylvania Power Company and,

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under favorable conditions in the bond market, expects to be able to refund advantageously certain issues of Northern Pennsylvania Power Company securities; and (4) Metropolitan Edison Company has large steam generating plants and a large transmission system interconnected with other similar operating public utility companies, while Northern Pennsylvania Power Company has but a few generating plants of limited capacity, although interconnected with other similar operating public utility companies, and on the consummation of the proposed merger it is contemplated the existing systems of the petitioners will be either directly or indirectly connected with each other, with resulting economies and improvements of the reliability of the service rendered by each.

For sake of simplicity in designation, we shall refer to the petitioners, respectively, as Metropolitan Company and Northern Company.

At April 30, 1935, Northern Company had authorized 50,000 shares of no par common stock, and 3,500 shares of \$100 par preferred stock, of which there were outstanding 22,130 shares of common stock and no shares of preferred stock. The balance sheet of that date shows a stated value of capital stock of \$2,600,000. The authorized indebtedness of Northern Company is \$10,000,000, of which \$4,004,000 was outstanding at April 30, 1935.

At the same date Metropolitan Company had authorized 500,000 shares of no par common stock, and 1,000,000 shares of no par preferred stock divided among six issues, of various dividend rates ranging from

\$5 to \$7. Of the authorized capital stock there were outstanding at April 30, 1935, 367,380 shares of common stock and 210,825 shares of preferred stock of the several issues, having a combined stated value as shown in the balance sheet, of \$35,353,630. The authorized indebtedness of Metropolitan Company is \$100,000,000, of which \$40,715,900 was outstanding at April 30, 1935.

The testimony shows the Metropolitan Edison Corporation to be sole owner of the common stock of Northern Company and of over 95 per cent of the common stock of Metropolitan Company. The 1935 annual reports of petitions, on file with us, show The Metropolitan Edison Corporation to have been consolidated with NY PA NJ Utilities Company, and the latter, at December 31, 1935, to be the sole owner of the common stock of both petitioners.

The balance sheets of the respective companies at April 30, 1935, show Northern Company to have total assets of \$8,451,723.17, including \$469,480.80 of deferred charges, and Metropolitan Company to have total assets of \$115,150,229.31, including \$3,520,986.36 of deferred charges. The fixed capital of Northern Company is shown at \$7,018,309.63, while that of Metropolitan Company is \$85,326,785.26.

The consideration of \$2,532,040.09 to be paid by Metropolitan Company to Northern Company was determined (T.14) by ascertaining from the original books of the companies comprising the present Northern Company, in so far as such books were available, the actual cost of the property to the constituent companies, adding

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to that sum the other assets of Northern Company and deducting therefrom the liabilities. The calculation is set forth in detail in Exhibit 8-A, which we here summarize:

Property, including work in progress, at April 30, 1935	\$6,928,021.42	
Less net write-ups	487,540.30	
		<u>\$6,440,481.12</u>
Other assets		
Additions and betterments to leased properties	\$90,288.21	
Cash	60,892.13	
Accounts receivable, etc.	195,607.23	
Materials and supplies	31,604.55	
Investment securities	452,881.44	
Sinking-fund assets	223,135.34	1,054,408.90
		<u>\$7,494,890.02</u>
Total property and assets to be acquired		
Less liabilities to be assumed		
Funded debt	4,004,000.00	
Accounts payable, etc.	147,227.48	
Consumers' deposits	80,041.38	
Unmatured interest on debt	52,465.06	
Taxes accrued	90,266.01	
Reserve for renewals and replacements	588,850.00	4,962,849.93
		<u>\$2,532,040.09</u>
Purchase price		

[1] The balance sheet of Northern Company at April 30, 1935, shows reserve for renewals and replacements at \$1,104,301.49, while the amount entered for this account in the determination of purchase price, summarized above, is but \$588,850. This latter sum represents the estimate of accrued depreciation embodied in the appraisal of Northern Company property as of June 30, 1934, by Edward J. Cheney, as contained in Exhibit "O".

If the cost of property as shown on the books of Northern Company and its constituent companies is to be used as a basis for determining purchase price, then the reserve for renewals and replacements, as shown on the books, and which has been provided for by annual charges against operating expenses and surplus, should likewise be used, and there is no justification, under these circumstances,

to use an estimate of accrued depreciation as set out in a reproduction cost estimate.

As set forth in Exhibit C-1, which embodies the proposed journal entry

in recording the purchase of Northern Company upon the books of Metropolitan Company, it is proposed to set up the amount of \$588,850 as "reserve for renewals and replacements." The books of Northern Company have set up for that reserve the sum of \$1,104,301.49 and if, after the consummation of the transaction, this reserve were entered on the books of Metropolitan Company at \$588,850, the difference of \$515,451.49 in effect would have been transferred from such reserve to unappropriated surplus. This sum is a component part of the purchase price of \$2,532,040.09, and the effect of treating the reserve for renewals and replacements, as above outlined, is to pass on that amount, substantially as a dividend, to the holding company of Northern Company. If the sum of \$1,104,301.49 for reserve for renewals and replacements is used instead of

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\$588,850, the purchase price would be reduced to \$2,016,588.60 and, based upon this test, the proposed purchase price is excessive to the extent of \$515,451.49.

In Re Edison Light & Power Co. (1935) 7 P.U.R.(N.S.) 337, that company sought our approval of the transfer of \$650,500 from its reserve for renewals and replacements to its unappropriated surplus account, following which the company proposed to declare a 50 per cent dividend amounting to a like sum to be paid to York Railways Company, owner of all the outstanding capital stock of Edison Light and Power Company. The payment of such dividend to York Railways Company was for the stated purpose of enabling it to increase its reserve for renewals and replacements by the amount of the dividend, as the reserve was alleged to be insufficient because of the abandonment of certain trolley lines during the prior two years. In that case, by our report and order of February 19, 1935, *supra*, at p. 341, we held that ". . . to approve the transfer of any sum from the reserve on the observed condition based upon estimated cost of reproduction new of the property, without giving detailed consideration to the expected service life and age of the

various units of property and the actual investment therein, would be in contravention of the existing order of this Commission prescribing the said uniform classification of accounts," and the application was denied.

The instant case is in point, wherein it is proposed to purchase the franchises and property of Northern Company, which now has a reserve for renewals and replacements of \$1,104,301.49 and, upon the consummation of the transaction, to enter on the books of Metropolitan Company the sum of but \$588,850 for that reserve. Basing the purchase price on a reserve of \$588,850 is but to pass on to the owners of Northern Company, substantially as a dividend, the difference of \$515,451.49, a transaction analogous to the one in the Edison Light and Power Company Case, referred to above.

In Exhibit "O" there is set out a reproduction cost estimate of fixed capital of Northern Company as of June 30, 1934, totaling \$6,543,109.25, including work in progress of \$5,581.72. The accrued depreciation is set out at \$588,850, which is almost exactly 9 per cent of the reproduction cost new. We here summarize this estimate of reproduction cost:

Total physical property, including 5% for omissions and contingencies	\$5,489,097.53
Engineering and superintendence during construction	\$243,450.00
General officers' and office salaries and expenses during construction ..	219,500.00
Organization	274,460.00
Law expenditures during construction	24,380.00
Taxes during construction	27,390.00
Interest during construction	259,250.00
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Total	\$6,537,527.53
Work in progress	5,581.72
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Total reproduction cost new at June 30, 1934	\$6,543,109.25
Accrued depreciation	588,850.00
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Depreciated reproduction cost	\$5,954,259.25

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[2] It is to be noted that the overheads total \$1,048,430, which is approximately 19.1 per cent of cost of physical property, which itself includes 5 per cent for omissions and contingencies. It is our opinion that 19.1 per cent for construction overheads is excessive for a reproduction cost estimate of the property of Northern Company. We therefore apply such overheads as appear to us to be reasonable under the circumstances, which in the aggregate total \$594,694.62, which is 10.8 per cent of cost of physical property, including 5 per cent for omissions and contingencies. Deducting from the total reproduction cost estimate, including these overheads, accrued depreciation of 9 per cent, the ratio determined from Exhibit "O," there results a depreciated reproduction cost estimate of \$5,541,373.87, summarized as follows:

Total physical property including 5% for omissions and contingencies	\$5,489,097.53
Engineering and superintendence	\$238,657.42
Engineering on land and rights of way	12,332.38
Organization and promotion	84,656.36
Administrative, legal, and taxes	84,656.36
Interest during construction	174,392.10
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	\$6,083,792.15
Work in progress	5,581.72
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Total reproduction cost estimate as of June 30, 1934	\$6,089,373.87
Accrued depreciation	548,000.00
	<hr/>
Depreciated reproduction cost	\$5,541,373.87

In determining the purchase price, petitioners used a property valuation as determined from the books of \$6,440,481.12 and deducted therefrom a reserve for renewals and replacements of \$588,850, leaving a net of \$5,851,631.12. If, in the determination of the purchase price we substitute appraised values as set forth in Exhibit "O," using, however, what appears to us to be a reasonable allowance for

overheads and deducting accrued depreciation in the same ratio as in Exhibit "O," there results a net value of property of \$5,541,373.87, as set forth in the foregoing tabulation. This latter sum is \$310,257.25 less than the basis upon which the purchase price was determined by petitioners and by this test, the purchase price is excessive to that extent.

Metropolitan Company proposes to pay to Northern Company the sum of \$2,532,040.09, of which \$1,537,911.80 is to be in cash and \$994,128.29 is to be in securities. The sum of \$1,537,911.80 represents the cash realized from the sale by Metropolitan Company to its parent, The Metropolitan Edison Corporation, of approximately \$3,383,000 principal amount of 4½ per cent gold bonds, refunding series, due 1956, of Associated Electric Company, which sum was

ordered to be impounded by our order of May 7, 1935, Application Docket No. 33705.

In our report and order in that proceeding it appears that on October 6, 1931, Metropolitan Company filed with us a certificate of notification, reciting that \$4,429,900 of its first mortgage gold bonds, series D, 4½ per cent, had been sold at par and that \$2,892,381.56 of the proceeds were

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placed in the company's treasury in reimbursement for capital expenditures made between May 1, 1926, and August 31, 1931, and that the remaining \$1,537,518.44 were to be used in partially financing certain fixed capital additions, which were to have been made between October 6, 1931, and December 31, 1931. Such fixed capital, however, was not installed and the company, without notice to us, used that sum to purchase approximately \$3,383,000 principal amount of 4½ per cent gold bonds of Associated Electric Company. Such act by the company was contrary to The Public Service Company Law and the matter was drawn to the company's attention, whereupon it filed Application No. 33705, *supra*, seeking our approval of the sale of those bonds to its parent company, The Metropolitan Edison Corporation, for the sum of \$1,537,911.80. By our order in that proceeding of May 7, 1935, *supra*, we approved the sale and ordered the company to maintain that fund in cash, apart from its other cash deposits, to be used only for the payment of the cost of net additions to the company's fixed capital, or for such other purpose as we might approve.

The remainder of the purchase price in the instant proceeding of \$994,128.29 is to be paid in 4½ per cent gold bonds refunding series due 1956, of Associated Electric Company at the average cost to Metropolitan Company of 45.46 per cent, or market price at the time of consummation of the purchase, whichever is greater. On this basis a maximum of \$2,186,800 face value of bonds would be paid to Northern Company.

Referring to the entire purchase

price of \$2,532,040.09, it is to be noted that for the twelve months ended December 31, 1934, the net income of Northern Company (Exhibit G-5) was \$198,772.79, which is 7.85 per cent of the purchase price, while for the five months ended May 31, 1935, the net income was \$15,255.39, which is at the annual rate of 1.45 per cent of the purchase price.

Petitioners aver as their first reason favoring the merger, that they are affiliated companies and for some time have been under the same management, but no specific testimony was adduced in this record upon this point. If any substantial benefits upon this score would accrue from a merger of properties such as those of petitioners, we might say they have already been realized, since petitioners "for some time past have been under the same management."

As the second reason favoring the merger, petitioners state that the combination of the properties and corporate organizations into one operating and corporate unit will result in the elimination of existing duplication, making for increased efficiency and economy in operations. It appears (T. 35, 36) that the records of Northern Company are kept in Reading and that the principal accounting work is done there under the supervision of the comptroller, who also occupies the same position with respect to Metropolitan Company. This testimony further shows that the merger will have the effect of eliminating one set of records, one set of annual reports to the Commission, one set of returns for taxes and all reports required, that the accounting work will

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be simplified, and that the expense of auditing will be reduced.

If the merger is consummated, it is planned (T. 37, 38) to substitute one open end mortgage of Metropolitan Company to cover both properties and it is stated that this would simplify the financing of future additions and betterments, as compared to the two separate mortgages now against the properties. Trustees' fees under one mortgage will be reduced somewhat. Finally (T. 39) because of the cancellation of the stock of Northern Company, the stock bonus tax which has been paid thereon would be credited against the bonus tax assessed on future issues of stock of Metropolitan Company.

Manifestly, all these economies would be realized upon the consummation of the merger of the two companies but, in every particular, the record in this proceeding fails to state the reduction in annual operating expenses anticipated to result therefrom. We are constrained to say the combined effect of these economies would not be material and, in the last analysis, would have virtually no effect upon rates to consumers, so that these benefits would not accrue to the ratepayer.

As the third reason advanced favoring the merger, petitioners state that Metropolitan Company is in a better position to finance improvements and extensions to the property of Northern Company and under favorable conditions in the bond market, expects to refund advantageously certain securities of Northern Company. At April 30, 1935, Northern Company had outstanding \$4,004,000 of bonds, while Metropolitan Company had out-

standing \$40,715,900 of bonds. Reference is again made to the record (T. 37, 38) showing that petitioners plan to substitute one mortgage for the existing two, to finance future additions to Northern Company under such mortgage of Metropolitan Company and to refund the bonds of Northern Company with new bonds of Metropolitan Company. The record further shows (T. 61) that the bonds of Northern Company are callable at 105 per cent and that they could be refunded at a lower annual cost in the form of Metropolitan Company bonds, rather than Northern Company bonds. Supporting this statement is the testimony (T. 64, 65) that Metropolitan Company is a better known one and more appealing to the investor, that it is a strong company, having large facilities serving important centers, while Northern Company has no outstanding features and no large power plants, that the territory is widely scattered, rather sparsely settled, and rural in character, and not having a suitable appeal to the investor. At the time of the hearing of July 3, 1935, the 4½ per cent bonds of Metropolitan Company were quoted at 107¼ per cent, while the Northern Company's 5 per cent bonds were quoted at 103¼ per cent. While these quotations indicate the Metropolitan Company bonds to be more favorably considered in the investment market than the Northern Company bonds, petitioners offered no testimony that Northern Company acting independently could not refund its bonds at a lower annual cost.

The record shows (T. 43) that no large improvements to the property of Northern Company are contemplated and it therefore appears that the prin-

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cial financial advantage attaching to the merger would accrue to the equity security holders, in that the higher interest-bearing securities of Northern Company would be refunded with lower interest-bearing securities of Metropolitan Company. In this event the consumer of electricity would not share in such benefit, as rates charged for electric service are not predicated on interest and dividends paid on securities. However, generally we are inclined to favor refunding of securities at lower interest rates and, in the past several years, have approved a number of applications for just that purpose.

Lastly, petitioners advance the reason favoring the merger that Metropolitan Company has large generating plants and a large transmission system, interconnected with similar other operating public utility companies, while Northern Company has but few generating plants, and of limited capacity, although interconnected with other similar operating public utilities, and that it is contemplated that the systems of petitioners will be either directly or indirectly connected with each other, with resulting economies and improvement of service rendered by the systems of each.

Northern Company (T. 71, 72) has as its principal source of supply New York State Electric and Gas Corporation, and has five generating plants of its own, one small steam plant at Towanda, and four small hydro plants at Muncy, Tunkhannock, Oakland, and Lanesboro. Northern Company has 11 points of interconnection with affiliated companies and 6 points of interconnection with nonaffiliated companies. The 11 points of intercon-

nection with affiliates are all located along the New York-Pennsylvania state line, while the 6 points of interconnection with nonaffiliates are all within Pennsylvania (Exhibit "M"). During 1934 Northern Company (Exhibit "N") purchased 28,524,213 kilowatt hours of electricity and generated 4,184,395 kilowatt hours, summarized in the following tabulation

	Kilowatt Hours in 1934
Power purchased	
From affiliates	27,775,938
From nonaffiliates	748,276
Power generated	4,184,395
Total purchased and generated ...	32,708,610

Metropolitan Company (T. 73, 74) has four principal sources of power supply, that is, steam plants at Middletown, Reading, and Easton, and a hydro plant on the Susquehanna river below Harrisburg. A portion of its supply is received from New Jersey Power and Light Company (a New Jersey affiliate, owned by The Metropolitan Edison Corporation) through a connection south of Phillipsburg. Metropolitan Company also has connections for interchanging power with Pennsylvania Power & Light Company, Pennsylvania Water and Power Company, and Philadelphia Electric Company. We here set out the data regarding power of Metropolitan Company for 1934, as taken from the annual report of that company on file with us:

	Kilowatt Hours in 1934
Power purchased	13,598,065
Power received under interchange agreements	173,390,581
Power generated	274,187,112
Total power	461,175,758

A witness for petitioners testified

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(T. 75, 80) that Metropolitan Company has in its own plants ample capacity to care for all the requirements of Northern Company and that if the merger of the two properties is consummated, Metropolitan Company would not purchase any additional energy from New Jersey Power and Light Company. However, these statements are not supported by any detailed exposition.

At the present time there is a 110,000-volt transmission line of Northern Company, extending through the eastern portion of the chartered territory from Peckville to the New York-Pennsylvania state line, a distance of approximately 42.5 miles. The testimony indicates (T. 75) that petitioners contemplate continuing this line southward from Peckville to Stroudsburg approximately 43 miles, and the existing lines to the Glendon substation south of Easton will be newly built or reconstructed. The total cost of these improvements is estimated at \$750,000, of which \$150,000 to \$250,000 (T. 77) is properly chargeable to the needs of Metropolitan Company alone and the balance is chargeable to the connection of the two systems. The proposed line would be a single circuit of 110,000 volts and 30,000 kilowatts capacity. It is stated (T. 79) that whether or not the merger is approved, there is a strong likelihood this line will be built as "Binghamton . . . needs power today, . . ." The northern terminus of the 110,000-volt line is in the vicinity of Binghamton, which is in New York, but several miles beyond the state line.

The charter territories of petitioners are shown on Exhibit "M" and in

the case of Northern Company this exhibit shows also the 110,000-volt line from Peckville to the state line and the 33,000-volt lines leading south from the New York state line into the territory of Northern Company, over which power is purchased from the affiliates in New York. At no point is the 110,000-volt line shown connected with these 33,000-volt lines, and in fact it crosses but one of them. The inventory of Northern Company property (Exhibit "O") sets out this 110,000-volt line, which is a single circuit of 30,000 kilowatts capacity, and nowhere is any of the equipment of this line shown as having a lesser voltage than 110,000 volts. The conclusion is therefore inescapable that no service in Pennsylvania is taken by Northern Company from this line and that any power passing over the line in a northerly direction is delivered directly into New York state and in a southerly direction is delivered to Peckville, which is outside of and south of the charter territory of Northern Company.

It might be argued that if power from Metropolitan Company were delivered over this line into New York, the load on New York State Electric and Gas Corporation would be reduced and it would be better able to serve Northern Company. Under these circumstances, it could not be said that the intention to serve Northern Company with power from the plants of Metropolitan Company was actually being carried into effect. If the true purpose is to deliver power into New York, this result can be realized through other means than the merger of petitioners.

Nowhere in this record is any plan

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set forth by which it is proposed to interconnect the transmission facilities of Northern Company with the 110,000-volt line and thus enable power in the line to be served throughout the system of Northern Company. Obviously such facilities are necessary if the systems of Northern Company and Metropolitan Company are in fact to be directly connected with each other and operated and served as a composite whole. The record is barren of what facilities are required for this purpose and their estimated cost. If such facilities were enumerated and were planned to be constructed, the plan would still not be complete as it would be improvident to attempt to serve a territory so vast as that of Northern Company with a single circuit line such as is proposed from Stroudsburg to Peckville and as now exists from Peckville to the New York state line. In the event of failure of this single line, service would be interrupted in the entire Northern Company area.

New York State Electric and Gas Corporation is the principal source of power of Northern Company. We have referred to the contract on file with us covering the purchase of electricity by Northern Company from that New York affiliate, and find the contract became effective January 1, 1935, and continues in effect until January 28, 1945, and thereafter until terminated by six months' prior notice by either party. The record in this proceeding contains no evidence that such contract can or would be terminated prior to 1945 or at any time.

We conclude that the record fails to show that any plans are in contempla-

tion by which the systems of Northern Company and Metropolitan Company will be interconnected to be operated as a composite whole, with power being furnished in the Northern Company area from plants of Metropolitan Company; that if the connection from Stroudsburg to Peckville is installed it will be used only for an interchange of power between Metropolitan Company and territory in New York state, and obviously not for service in Northern Company's territory in Pennsylvania; that even though connection were made to the 110,000-volt line from Peckville to the New York state line, adequate service could not be rendered as it is but a single circuit line, and there is no showing that the contract with New York State Electric and Gas Corporation can be or is to be terminated.

With respect to rates for electric service, it appears that (T. 95) below 27 kilowatt hours per month the domestic rates of Metropolitan Company are lower than those of Northern Company; that between 27 and 90 kilowatt hours per month the rates of Northern Company are lower than those of Metropolitan Company, and above 90 kilowatt hours per month the Metropolitan Company's rates are again lower. The average rate paid by residential customers of Northern Company is about one cent more per kilowatt hour than the rate paid by the residential customers of Metropolitan Company (T. 94).

It appears that no immediate rate reduction by Northern Company is contemplated (T. 101) although it is stated that if the merger is consummated the trend toward rate simplification and reduction will be empha-

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sized and accelerated. It would appear to us that the consummation of a merger should not be required to simplify rate structures and if Northern Company is desirous of simplifying its rates it might well do so regardless of whether or not the merger is carried into effect, particularly since many companies in the past have simplified their rates without such motivating force as is implied is here necessary.

The charter territory of Northern Company extends from the Delaware river on the east, to a point about midway of the breadth of the state, and from the New York state line, southward a varying distance, the maximum being about 60 miles (Exhibit "M"). The charter territory of Metropolitan Company is irregular in shape, extending from Milford and the Delaware river on the northeast, to the Maryland state line on the southwest, in the vicinity of Gettysburg. As appears on Exhibit "M," the territory of Northern Company is nearly twice as large as that of Metropolitan Company. For the five months ended May 31, 1935 (Exhibit "E-3") it appears that service was furnished by Northern Company to 20,868 consumers, while Metropolitan Company served 106,333 consumers. In view of the relation of areas, the respective number of consumers served indicates a thinly populated area for Northern Company and a densely populated area for Metropolitan Company. This conclusion is supported by the testimony (T. 64). It is reasonable to infer that in a sparsely populated area the capital cost of transmission and distribution system per customer would be greater

than in densely populated areas, with consequent increased cost of service. Under average circumstances, it is a reasonable conclusion that rates in an area such as Northern Company might always be higher than in a dense area such as Metropolitan Company. The respective areas of petitioners are dissimilar in nature and widely separated, at the eastern ends by 32 miles, and at the western ends by more than 100 miles, and, in our opinion, are not adapted for combining into one composite service area.

[3] The testimony shows that The Metropolitan Edison Corporation owns all of the common stock of Northern Company and over 95 per cent of the common stock of Metropolitan Company. In effecting the merger of the two companies, it is proposed to have Metropolitan Company assume all liabilities of Northern Company and to transfer the franchises and property of Northern Company to Metropolitan Company for a consideration of \$2,532,040.09, divided between cash and securities as hereinbefore outlined. The Metropolitan Edison Corporation, as sole owner of the common stock of Northern Company, would receive the cash and securities representing the consideration. Under the present arrangement, The Metropolitan Edison Corporation, as the equitable owner of Northern Company and of Metropolitan Company would, upon the consummation of the proposed transaction, still be the equitable owner of both companies, the franchises and property of Northern Company having been moved to Metropolitan Company and the cash and securities having been moved from Metropolitan

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Company to The Metropolitan Edison Corporation. It is our opinion that these movements of property and cash and securities are unnecessary for the purpose of effecting the consolidation and constitute an unnecessary draining by the holding company of the current assets of its subsidiary, the Metropolitan Company.

The consolidation might well be effected by the exchange of the stock of Northern Company with common stock of Metropolitan Company and under such plan, The Metropolitan Edison Corporation would remain the equitable owner of both companies and the cash and securities representing the proposed consideration would remain with the subsidiary and the circumstances of ownership would be identically as they are today. There is no compelling need for any other course to be followed in effecting the consolidation and merger of the properties of Northern Company and Metropolitan Company.

Upon full consideration of the matters involved in this proceeding, and for the reasons hereinbefore enumerated and more particularly set out, we cannot find that the proposed sale

of the franchises and property of Northern Pennsylvania Power Company to Metropolitan Edison Company, for a consideration of \$2,532,040.09, is in the public interest, nor that such sale is necessary or proper for the service, accommodation, convenience, or safety of the public. As a logical sequence it follows that we cannot find that the proposed sale of certain $4\frac{1}{2}$ per cent gold bonds, refunding series, due 1956, of Associated Electric Company, by Metropolitan Edison Company to Northern Pennsylvania Power Company as part of the consideration of the proposed sale, is in the public interest; and we cannot grant approval to the use of the sum of \$1,537,911.80 in cash for the purpose of the balance of the consideration of the proposed sale, which sum in cash was ordered impounded by our order of May 7, 1935, Application Docket No. 33705; therefore,

Now, to wit, September 21, 1936, it is *ordered*: That approval of the sale of the franchises and all the property, real, personal, and mixed, of Northern Pennsylvania Power Company to Metropolitan Edison Company, be and is hereby denied.

PENNSYLVANIA PUBLIC SERVICE COMMISSION

Re Modern Transfer Company, Incorporated

[Securities Docket No. 185.]

Accounting, § 32 — Assets in excess of purchase price — Surplus.

A corporation which acquires assets having a net worth in excess of the amount of stock issued in payment should credit the spread between net worth and the stock issued to "donated surplus" instead of merely "sur-

RE MODERN TRANSFER COMPANY, INC.

plus" so that the retention of the acquired assets in the business may be insured and no way left open for a credit to "earned surplus" account from which dividends subsequently might be paid.

[September 14, 1936.]

APPPLICATION for approval of issuance of common stock for acquisition of freight hauling business; application granted with provision as to accounting.

By the COMMISSION: Modern Transfer Company, Inc., was incorporated June 18, 1936, for the purpose of acquiring and operating an intrastate and interstate motor freight hauling business previously conducted by an individual, one F. A. Steward. The company's offices are at Allentown.

By agreement dated July 1, 1936, the company is to acquire assets and assume liabilities of Mr. Steward as follows:

<i>Assets:</i>			
Cash	\$2,994		
Fixed assets (depreciated original cost)	42,454		
Organization costs of company advanced by Mr. Steward	500	\$45,948	
<i>Liabilities:</i>			
Equipment obligations	\$5,763		
Accounts payable	5,378	11,141	
Net worth			\$34,807

As consideration for the net worth of this business, the company has agreed to deliver \$25,000 of its common stock to Mr. Steward, and it is the issuance of this stock which is now before us.

The figure assigned to the fixed assets in the above table represents the original cost of these assets less depreciation observed by Commission engineers. The stock issue thus meets one of our requirements for approval, for it does not exceed the depreciated

original cost of the fixed assets less the \$5,763 of liens against them. It also meets the second requirement, in that it does not exceed the net worth of the business, computed when using depreciated cost as a basis for valuing fixed assets.

One feature of this application which may or may not be objectionable is an indication that the spread between the net worth of the business and the stock to be issued therefor will be credited to "surplus" account. This is not sufficiently specific, for it leaves the way open for a credit to the "earned surplus" account, from which dividends subsequently may be paid, whereas the proper credit would be to "donated surplus," insuring the retention of the acquired assets in the business. We will provide for this matter in our order.

Upon consideration of this application, the amount and character of the securities involved herein, and other relevant matters, the Commission finds and determines that the purpose of the issuance of the securities is authorized by law; that the issuance of said securities is reasonably necessary for that purpose; and that approval of the application is necessary or proper for the service, accommodation, or convenience of the public.

The foregoing finding and determination, however, shall not be con-

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strued to imply any guaranty or obligation on the part of the commonwealth of Pennsylvania as to such securities, nor shall it be taken as requiring the Commission, in any proceeding brought before it for any purpose, to fix a valuation which shall be equal to the total of these and any other outstanding securities of petitioner, or to approve or prescribe a rate which shall be sufficient to yield a return on said securities; therefore,

Now, to wit, September 14, 1936,

it is *ordered*: That the issuance of \$25,000 of petitioner's common stock upon the terms recited in this application, be and is hereby approved, and that a certificate of public convenience issue in evidence thereof.

It is *further ordered*: That the excess of the net worth of the assets acquired by petitioner over the par value of the common stock to be issued therefor be credited upon petitioner's books to "donated surplus" account.

ILLINOIS COMMERCE COMMISSION

Illinois Commerce Commission v. Commonwealth Edison Company

[No. 22337.]

Valuation, § 122 — Overheads — Items charged to operation.

1. Expenditures representing largely payments for general administrative and supervisory services should not be added to book cost as an adjustment for determining the rate base when, over a period of years, they were considered as a part of the company's operating expenses and were so charged upon its books and reported to the Commission, p. 405.

Depreciation, § 32 — Sinking-fund basis.

2. Annual depreciation was considered as being computed on a sinking-fund basis, in determining a basis for rates, where no accrued depreciation had been deducted from original cost, p. 406.

[October 2, 1936.]

INVESTIGATION of telephone rates on citation by Commission to show cause; reduced rate schedules approved.

APPEARANCES: Harry R. Booth, Assistant Counsel, and William A. Dittmer, Supervisor Rate Investiga-

tions, for the Commission; Isham, Lincoln & Beale; Burry, Johnstone, Peters & Dixon; Wilson & Mc-

Irvine; Harry J. Dunbaugh and Guy M. Peters of Counsel, Attorneys for Commonwealth Edison Company.

By the COMMISSION: On April 13, 1933, the Commonwealth Edison Company which furnishes electric service in the city of Chicago, hereinafter referred to as the company, was cited by the Commission to show cause why its electric rates should not be reduced. On the return citation day, April 27, 1933, the Commission suggested that expensive and protracted rate hearings might be avoided by informal conferences between the company and Commission representatives for the purpose of discussing the matters involved in the citation with the hope that a voluntary reduction might be agreed upon to the extent justified by the facts.

The company expressed a willingness to meet with the Commission, and negotiations were undertaken extending over a number of months. The company agreed to make some minor reductions in rates to large power customers, but stated they were unable to make any reductions to residential or commercial customers, except to absorb, beginning with July 1, 1933, the 3 per cent Federal tax on electricity amounting to about \$1,450,000 per year. After further conferences and continuances, hearings were commenced, with Commissioner Charles E. Byrne presiding, on October 11, 1934, and proceeded with only minor interruptions from that time up to and including July 2, 1936. The record in the case comprises 20,742 pages of testimony and 264 exhibits. The company presented fifty-eight wit-

nesses and the Commission, sixteen witnesses.

Following the closing of the record on July 2, 1936, oral arguments were had before the Commission on August 5 and 6, 1936, and briefs were filed by company and Commission counsel.

After the filing of briefs and oral argument, while the matter was under consideration by the Commission, conferences with the company were resumed with a view to arriving at a settlement in the case which would make a substantial reduction immediately available to the domestic and commercial consumers in Chicago and eliminate the possibility of a long and protracted delay in the final decision, which might be occasioned by an appeal to the courts.

The company has agreed to accept a rate base valuation of \$318,000,000 and a reduction in rates of \$3,000,000, substantially all of which is to be applied to a reduction in the rates for domestic and commercial consumers. The company will also continue to absorb the 3 per cent state public utility tax, amounting to approximately \$1,500,000 per year. A separate order will be entered in Docket No. 24756 dismissing the application of the company for an increase in rates sufficient to cover the amount of this tax.

[1] It is unnecessary to discuss in detail the many points involved which are covered in the voluminous testimony, the many exhibits, and the careful and detailed printed briefs. One point, however, is deserving of special mention. The company contended that the cost of its physical property as shown by the books did not report the true or actual cost to the company

ILLINOIS COMMERCE COMMISSION

for such property, inasmuch as many items of cost had not been charged to the property account. The amount of the adjustment thus proposed by the company to be made to the cost of its physical property is approximately \$40,000,000. This adjustment the Commission cannot permit in the determination of the rate base.

This \$40,000,000 represents what the company now claims should have been allocated to construction during the period from 1908 to 1934. These expenditures represent largely items which the company paid during these years for general administrative and supervisory services. It is evident that the company considered these expenditures as a part of its daily operating expenses because it so charged them upon its books and so reported them in its reports to the Commission. It would be improper to allow the company to capitalize on its books now any items (apart, of course, from mere accounting errors) which were charged to operating expenses and so reported in reports to the Commission for the period from July 1, 1913, to the present.

The original cost new of the physical property of the Commonwealth Edison Company to be considered for rate-making purposes did not exceed, as of December 31, 1934, the amount of \$296,000,000. This is arrived at by taking the total cost per books, plus interest during the construction, amounting to \$294,072,475, as shown in Commission Exhibit No. 53, and adding thereto substantially \$2,000,-

000, which is our estimate of the maximum amount of adjustments applicable to the property installed prior to July 1, 1913.

[2] The rate base of \$318,000,000 previously referred to is thus sufficient to embrace all proper elements of value including the full original cost of the property, which is the amount actually invested by the company, allowances for necessary working capital, and any intangible elements of value which may attach to the property. Since no accrued depreciation has been deducted from original cost, annual depreciation is herein considered as being computed on a sinking-fund basis.

A rate reduction of \$3,000,000 will still permit the company to earn a fair return upon the rate base value as determined herein.

We, therefore, find:

1. That as of December 31, 1935, the rate base value of the property of the Commonwealth Edison Company, used and useful, in the rendering of electric service in the city of Chicago was \$318,000,000.

2. That the original cost for rate-making purposes of the physical property included in the property account on the books of the company as of December 31, 1934, did not exceed the sum of \$296,000,000.

3. That the electric rates of the Commonwealth Edison Company are and will be for the future excessive to the extent of not less than \$3,000,000 per year, after absorption of the 3 per cent state public utility tax.

PENNSYLVANIA PUBLIC SERVICE COMMISSION

Francis Hatmaker, Doing Business as
The Leader Telephone Company

v.

Mrs. John P. Burke, Doing Business as
Suscon Telephone Company

[Complaint Docket No. 11161.]

Re Mrs. John P. Burke, Trading as
Suscon Telephone Company

[Application Docket No. 34640.]

Electricity, § 6 — Location of telephone lines.

Telephone lines of separate companies should not be located on opposite sides of a road, but wherever practicable only one side of a highway should be occupied by communication circuits, leaving the other side clear for electric circuits, especially in rural sections.

[September 15, 1936.]

COMPLAINT by operator of telephone service line company against operations of a similar company and application of the latter for approval of operating rights; complaint sustained in part and dismissed in part and operating authority granted.

By the COMMISSION: The complainant in the proceeding at Complaint Docket No. 11161 alleges that respondent is furnishing telephone service to the public in the township of Pittston, Luzerne county, and along Bear creek road in said township, without first having obtained the nec-

essary approval of the Commission in violation of The Public Service Company Law; that respondent has been and is erecting telephone poles and lines on the highways of said township, which said erection of poles and establishment of lines is interrupting and interfering with the telephone

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service of complainant; that respondent is violating her tariff on file with the Commission by charging less than the rate stated therein for telephone service, and by furnishing telephone service to the public generally in the township of Pittston, although the filed tariff authorizes service only to the family and neighbors of respondent.

In answer, respondent denies the allegations of complainant, and avers that she is furnishing telephone service in accordance with the laws of Pennsylvania; that she has erected no poles or lines which were or are interrupting or interfering with the telephone service of complainant; and that the subscribers of respondent are charged rates shown in tariffs filed with the Commission.

The parties to the proceeding at Complaint Docket No. 11161 are two service line companies whose lines are connected to the Pittston switchboard of The Bell Telephone Company of Pennsylvania. The complainant, at the time of hearing, was serving eleven subscribers, and the respondent nine.

Respondent admitted of record that she was operating as a public service company without first having obtained a certificate of public convenience authorizing such operation, as required by Art. III, § 2, of The Public Service Company Law, and that such operation was begun after January 1, 1914. She stated that she had not known it was necessary to secure such a certificate. The complaint must, therefore, be sustained in so far as it relates to illegal operation as a public service company, and respondent will be ordered to cease and desist from such

operation. Respondent, however, has filed an application for the necessary Commission approval at Application Docket No. 34640, and requested temporary approval of the service pending disposition of the application. Such temporary approval was granted by the Commission on August 4, 1936.

Complainant stated, and respondent denied, that respondent was interfering with the telephone service of complainant. Complainant contended that this interference consisted of mechanical difficulties in constructing and maintaining his circuits in close proximity to the collinear circuits of respondent, as well as inductive interference of "cross talk." The lines of both complainant and respondent are in the process of being relocated and rebuilt on account of highway alterations. It was stated that a clearance of from five to six feet could readily be provided between wires of the respective companies. We conclude that if there is any interference at present, it probably results from the temporary construction, and if both parties will cooperate in providing clearance of at least four feet, and in making and permitting clearance attachments where necessary, in the permanent construction, there should be no mechanical or inductive interference.

Complainant infers that, because of his prior occupancy, respondent should maintain her line on the opposite side of the road. This would be an improper practice to follow, inasmuch as it is generally recognized that, wherever practicable, only one side of a highway should be occupied by communication circuits, leaving the other side clear for electric circuits. This is especially true in rural sections

where it is probable that electric circuits may be maintained at voltages which make difficult the control of inductive interference to collinear telephone circuits, and may even result in hazards to telephone subscribers, as well as telephone plant. If it is necessary that two telephone lines occupy the same highway, it is essential that the telephone companies coöperate to the end that they may both serve the public, and, in so doing, present as few obstacles as possible to the furnishing of electric service.

The Commission finds and determines that complainant has failed to establish that respondent has seriously interfered with the telephone service which he is furnishing, and will, therefore, dismiss the complaint in so far as it relates to such interference.

No evidence was introduced in support of the allegations that respondent has been furnishing telephone service at rates less than those covered by her filed tariffs. The Commission finds and determines that complainant has failed to establish that respondent has been furnishing telephone service in violation of her filed tariffs, and will, therefore, dismiss the complaint in so far as it relates to such violation.

As stated previously, Mrs. John P. Burke, trading and doing business as Suscon Telephone Company, has filed an application at Application Docket No. 34640 for approval of her right to furnish telephone service in the territory which extends eastwardly along Bear creek road, in Pittston township, Luzerne county, for a distance of approximately three miles, from the junction with the base rate area boundary of The Bell Telephone Company of Pennsylvania.

At the hearing, the applicant, by petition dated July 23, 1936, requested permission to modify the application so that the territory covered therein would be described as extending eastwardly along Bear creek road, in Pittston township, Luzerne county, for a distance of approximately three miles, from the junction with the base rate area boundary of The Bell Telephone Company of Pennsylvania, and along and from other roads leading to and intersecting with said Bear creek road, and generally in Pittston township outside of the base rate area of The Bell Telephone Company of Pennsylvania. The application was vigorously protested by Francis Hatmaker, trading and doing business as The Leader Telephone Company, on the grounds, *inter alia*, that The Leader Telephone Company has a certificate of public convenience authorizing operation in this territory, and that there is no public necessity for two telephone companies in this rural section, which the record shows embraces "39 families" or "about 200 people."

The record shows that the subscribers of each company are satisfied with the telephone service received, and that a considerable amount of construction would be required for either company to serve all of the subscribers of the other, unless it should purchase the plant of the other company. Although each company indicated willingness and ability to buy the plant of the other at a reasonable figure, so that service could be consolidated and thus effect a reduction in plant required to serve the community, efforts to negotiate such a solution were unsuccessful. The ap-

PENNSYLVANIA PUBLIC SERVICE COMMISSION

plicant and protestant are both service line companies connecting with The Bell Telephone Company of Pennsylvania at Pittston, where switching service is supplied. The subscribers of either company, therefore, have access to the subscribers of the other company as well as to subscribers of The Bell Telephone Company of Pennsylvania.

The applicant has been furnishing telephone service since the latter part

of 1914 and, at the time of hearing, was serving ten subscribers.

Upon review of the testimony, we find and determine that the approval of the application of Mrs. John P. Burke, trading and doing business as Suscon Telephone Company, for the right to furnish telephone service in the area described in the amended application, is necessary for the service, accommodation, and convenience of the public.

NEW JERSEY SUPREME COURT

Plainfield Union Water Company v. Board of Public Utility Commissioners et al.

[No. 229.]

(— N. J. L. —, 186 Atl. 692.)

Reparation, § 11 — Powers of Commission — Statutory provisions.

1. Chapter 48 of the Laws of 1935, P. L. 127 (N. J. St. Annual 1935, §§ *167-101, *167-102), is both retroactive and prospective as to the power of the Board of Public Utilities to determine that an overcharge has been exacted, and to order its repayment, p. 411.

Reparation, § 3 — Constitutional requirements — Jury trial — Commission powers.

2. Chapter 48 of the Laws of 1935 [authorizing the Commission to determine when a public utility has exacted an overcharge and to order repayment] is not unconstitutional as conferring judicial power on an administrative body, or as impairing the right of jury trial, p. 412.

Reparation, § 38 — Defenses to claim — Voluntary payment.

3. The question whether excess payments to a utility were voluntarily made, is not one for determination by the Board in a hearing under Chap. 48 of the Laws of 1935, p. 412.

[August 15, 1936.]

Headnotes by the COURT.

CERTIORARI to review order of Board of Public Utility Commissioners directing a water company to repay amount found to have been collected without warrant or justification; writ dismissed. For Commission decision see 10 P.U.R.(N.S.) 49.

APPEARANCES: William H. Speer, of Jersey City, for prosecutor; John A. Bernhard, of Newark, for the Board; William Newcorn, of Plainfield, for city of Plainfield.

PARKER, J.: This is a certiorari to an order of the Board of Utility Commissioners, dated June 5, 1935 (10 P.U.R.(N.S.) 49) directing the water company, prosecutor, to repay within thirty days to the city of Plainfield the sum of \$7,679.08, the amount found by the Board to have been "without warrant or justification exacted by way of surcharge from the city by the company." So runs the language of the order. It is attacked on four principal grounds: (1) That at the time of hearing on the application of the city for repayment, no statutory power was vested in the Board to order repayment; (2) that Chap. 48 of the Laws of 1935, P. L. p. 127 (N. J. St. Annual 1935, §§ *167-101, *167-102), relied on by the Board, was not enacted until nearly a year after the hearing, which was held April 16, 1934, and remained undecided until the act of 1935 had become a law, and that said act is not retroactive; (3) that if it be held retroactive, it is unconstitutional; and (4) that the excess payments made by the city were voluntary and cannot be recovered back.

For present purposes, the first point may be conceded. Mr. Justice Donges, then a circuit court judge, so

decided in 1928. National Radiator Co. v. Pennsylvania R. Co. 6 N. J. Mis. R. 778, 781, P.U.R.1929A, 159, 143 Atl. 85, as did the Board itself in 1933. Flanagan v. Hackensack Water Co. (N. J.) P.U.R.1933B, 394. However, it is unnecessary for us to pass directly on the point, for reasons presently to be stated.

[1] Point 2 is that the act of 1935 is not retroactive so far as relates to directing restoration of moneys found to have been unlawfully exacted. This is the really important point in the case, and requires a careful examination of the statute, which is entitled as a supplement to the Public Utility Act of 1911 (P. L. p. 374) and reads as follows:

"1. Whenever any public utility shall heretofore have been or shall hereafter be authorized by the Board of Public Utility Commissioners to collect a surcharge to raise a definite amount of money or for a specified purpose and the Board, after hearing upon notice, shall determine that the amount authorized has been collected, or that the specified purpose has been accomplished, the Board is hereby empowered to require by an order in writing the immediate discontinuance of such surcharge. . . .

"2. Whenever after hearing upon notice the Board shall determine that any public utility has collected by means of a surcharge an amount of money exceeding the authorized amount or has continued to collect a

NEW JERSEY SUPREME COURT

surcharge after the specified purpose for which it was authorized has been accomplished, the Board is hereby empowered to require such public utility by an order in writing to repay the excess so collected to those from whom the same was collected. . . .

"This act shall take effect immediately.

"Approved March 5, 1935."

It seems clear enough that § 1 (N. J. St. Annual, 1935, § *167-101), empowering the Board to order a discontinuance of a surcharge previously authorized, is both prospective and retroactive as to the original authorization of the surcharge; and prospective as to the hearing and determination that it should cease. Section 2 (N. J. St. Annual, 1935, § *167-102) goes on to confer the power to order an excess surcharge refunded, and this section, it is argued, is not retroactive. But it is in *pari materia* with § 1; and applying the familiar rule that in construing a statute every part of it should be considered, we have no difficulty in concluding that the power to order refund of an excess charge includes excess charges collected before the act as well as those to be collected after it.

[2] The third point is that the act of 1935 is unconstitutional. This case was not argued orally, but was submitted on printed briefs; and in the main brief for prosecutor, less than a page is devoted to this point, with no citation of authority. The argument therein is that the legislature has undertaken to confer judicial powers upon an administrative body, and has al-

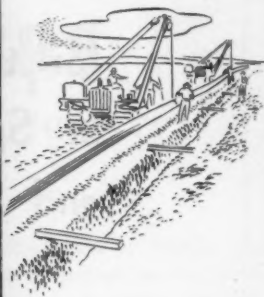
so infringed on the right of jury trial. To this it seems sufficient to say that so far as relates to the determination of facts by the Board, its jurisdiction was not questioned at the hearing; and if that body could lawfully find what was a fair rate for a utility to charge, and could lawfully permit a temporary increase, it could by the same token, when authorized by statute, determine when the increased rate should cease, and whether more than enough had been collected. If so, the power to order an excess refunded logically follows, and is quite analogous, in our judgment, to the power to require a railroad corporation to construct an overhead crossing, which is everyday practice. In the act of 1935 the legislature has made no provision for the enforcement of the orders contemplated therein, relying, no doubt, on § 33 of the original act, P. L. 1911, p. 387 (amended P. L. 1924, p. 379 [Comp. St. Supp. 1924, § *167-53]), and other cognate legislation. Our present concern, however, is with the jurisdiction of the Board to make the order.

[3] Finally, that the payments were voluntarily made. The Board at the hearing refused to go into this question, and properly as we think; for its function was limited by the statute and did not include defenses to a recovery which would naturally be for the determination of a court and jury, or in proper cases, a court of equity.

Our conclusion on the whole case is that there is no legal infirmity in the record brought up by this writ, and the writ will accordingly be dismissed, with costs.

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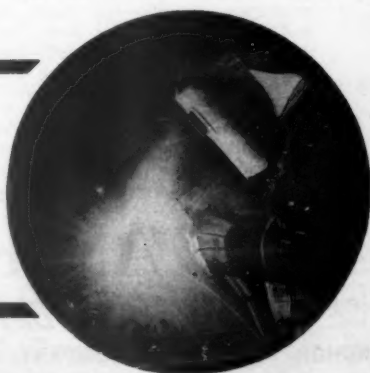
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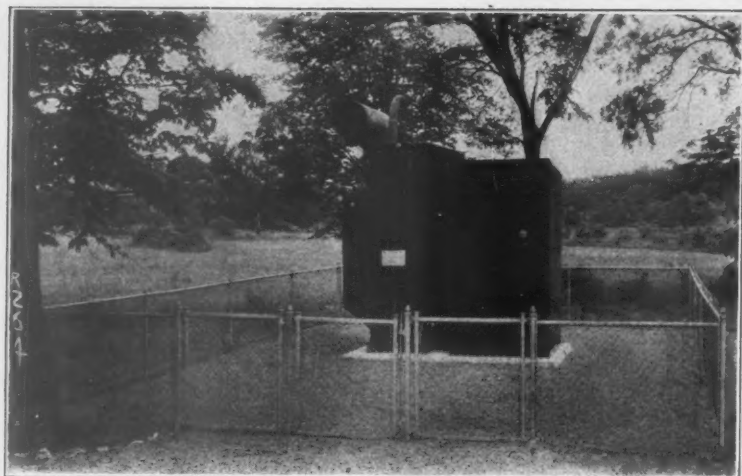
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No. 18, Dec. 3

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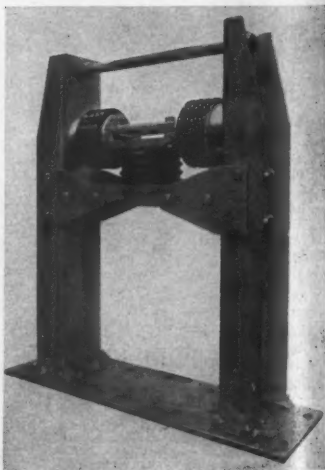
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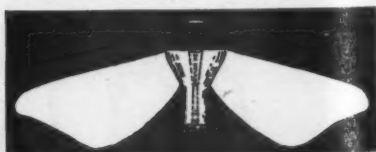
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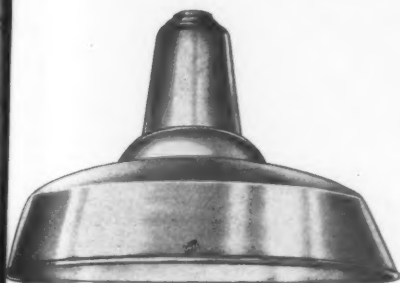
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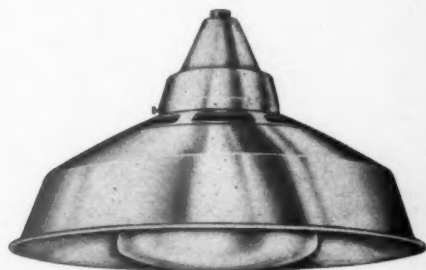
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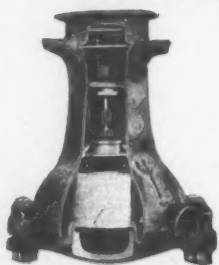
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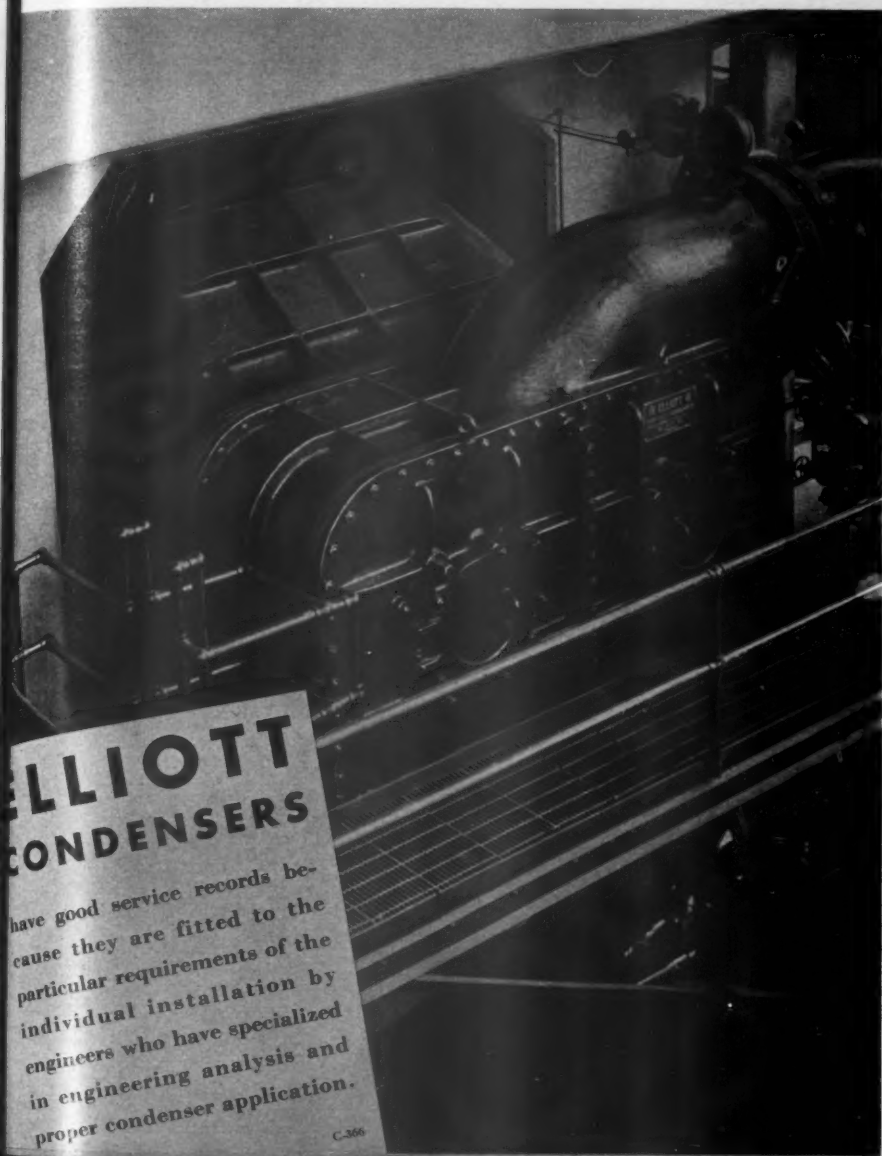
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have good service records because they are fitted to the particular requirements of the individual installation by engineers who have specialized in engineering analysis and proper condenser application.

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GARRISON EQUIPMENT is today standing guard over one of the largest municipally-owned turbo-generating stations in the country.

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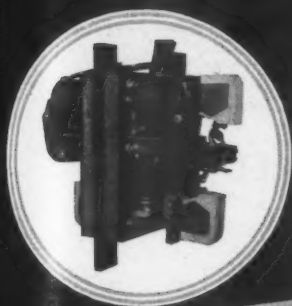
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- 4 Time Delay in all positions to prevent needless operations.
- 5 Diagram Nameplate.

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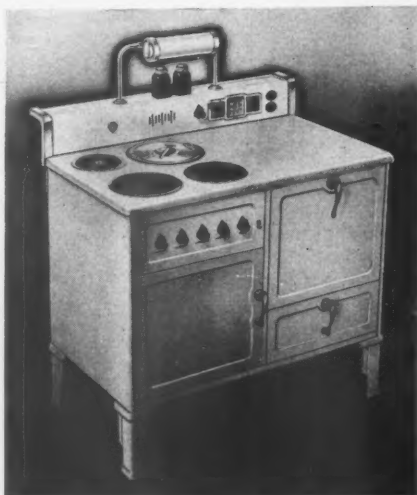
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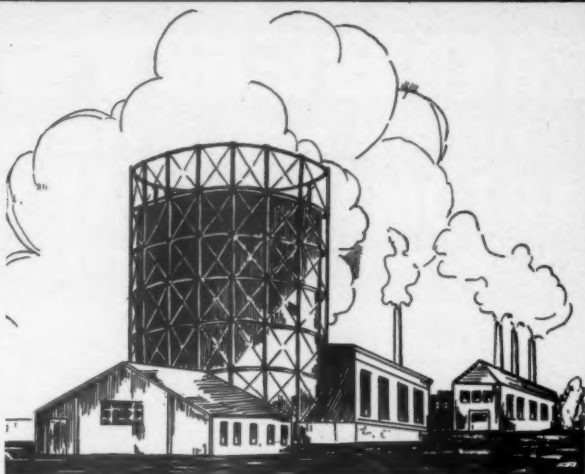
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FLUELESS and CABINET GAS-FIRED BOILERS

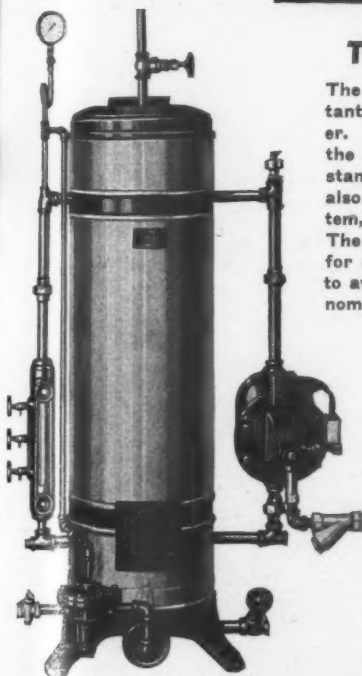
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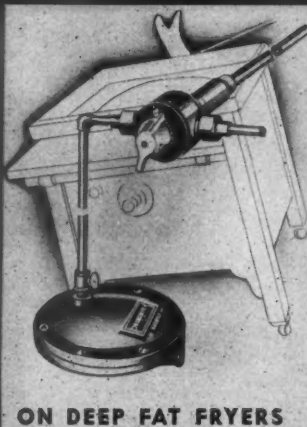
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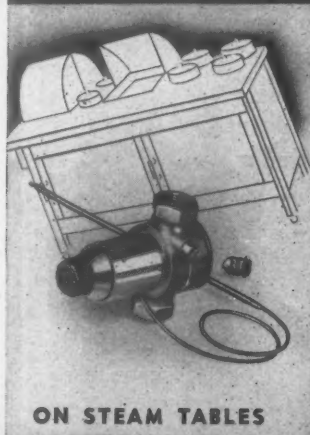
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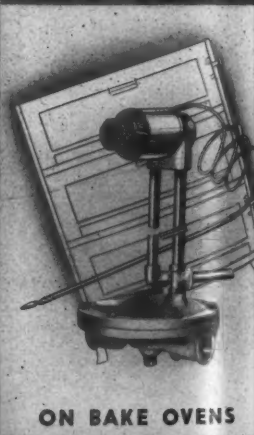
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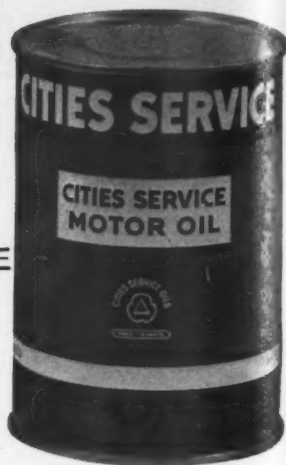
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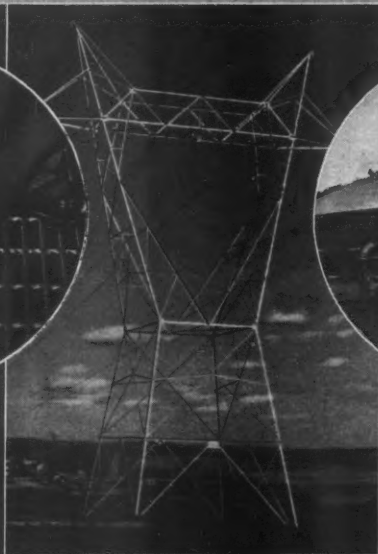
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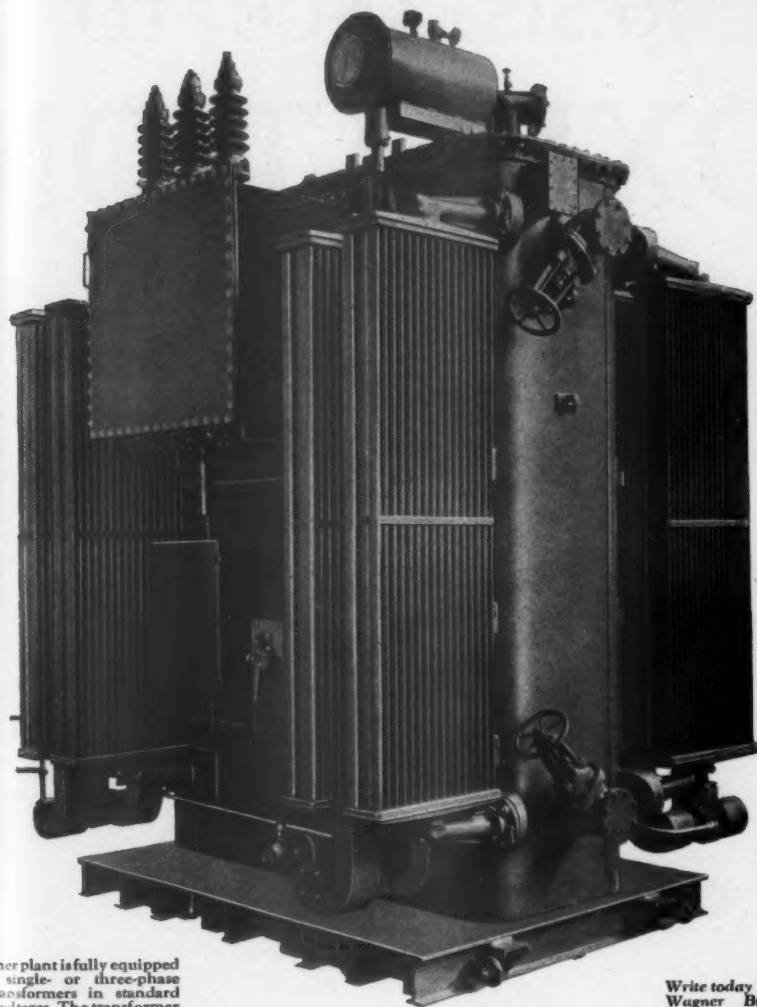
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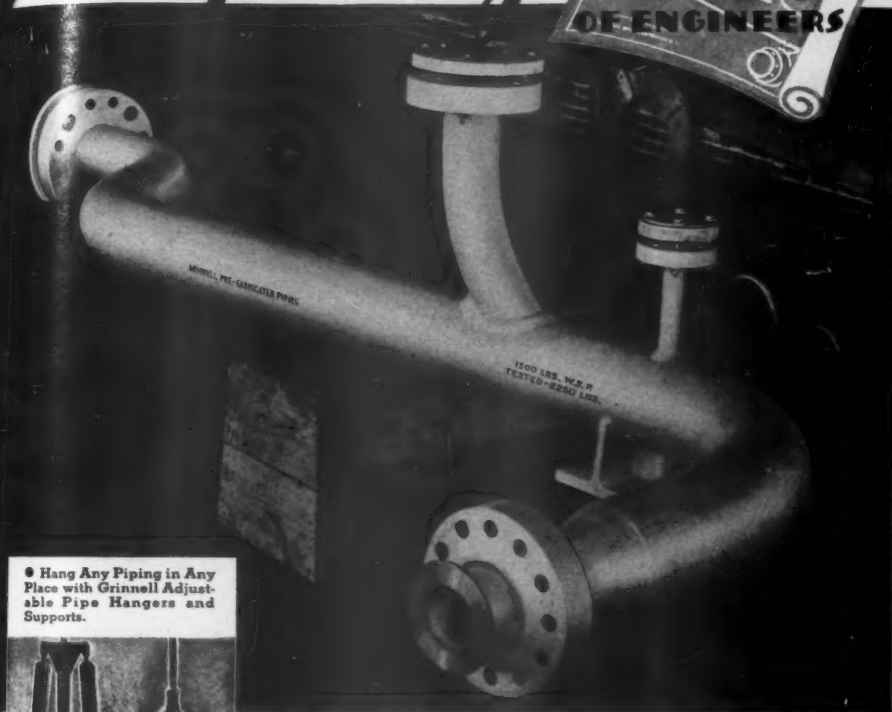


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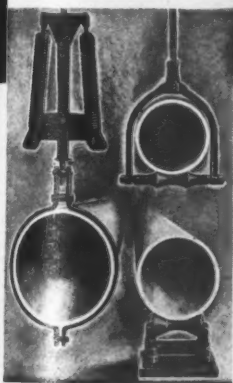
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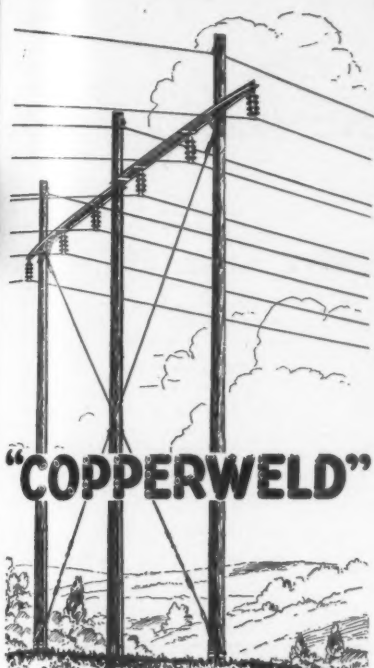
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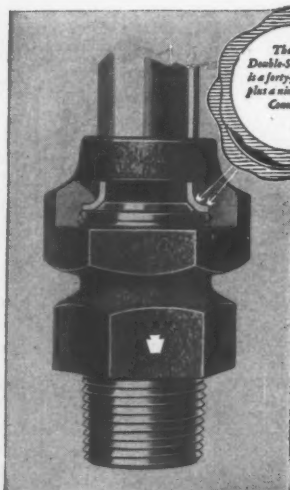
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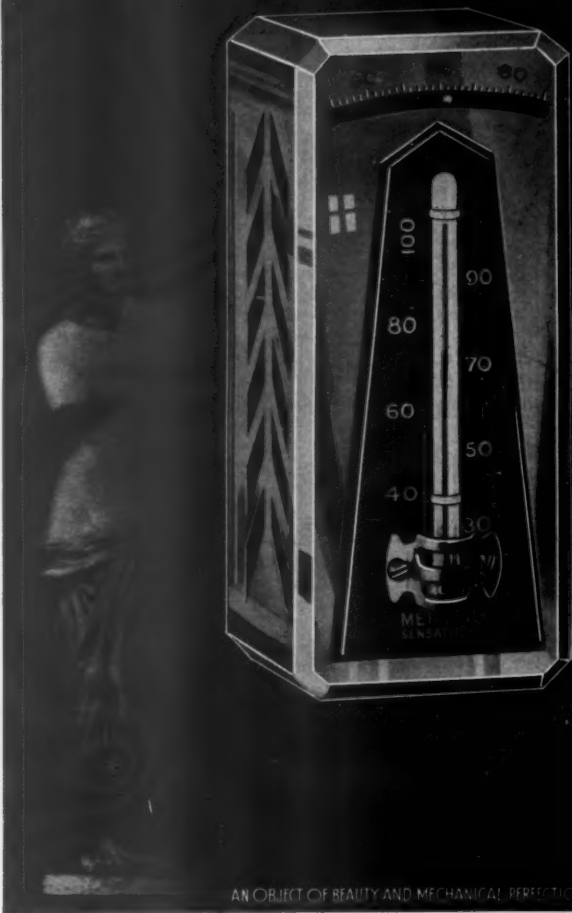
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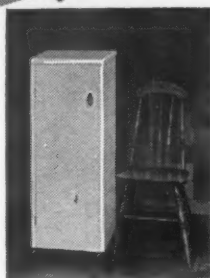
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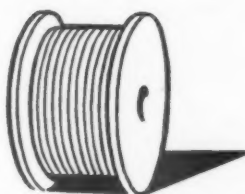
E. N. HURLEY, JR., PRESIDENT
HURLEY MACHINE COMPANY
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A Grand Gift . . .

POPULAR WITH RANGE OWNERS

The latest electrical appliance—especially popular with electric range owners. Provides hot water speedily and economically. Handy in bathroom or kitchen—connects with any convenience outlet. Effects savings of up to 40% in current consumption.

SPEEDY—ECONOMICAL

It brings 2 pints of water to a boil in less than 6 minutes (capacity 5 pints). Then a melodious whistle acts as a reminder to shut off the current. A cool trigger lifts spout cap when filling or pouring.

Write for complete information regarding this load-building appliance.

WEST BEND ALUMINUM COMPANY
DEPT. 66A WEST BEND, WISCONSIN

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"But . . . We Knew That All Along . . ."

A large retail store with an excessively difficult sales problem called in a sales counselor and asked for expert advice.

He talked with the store's executives, buyers, sales people.

He studied the store and its stocks.

He interviewed customers.

He trudged the streets to get first-hand buying histories of customers who had once dealt there and now did not.

In the end, he submitted a 62-page report, analyzing the store's problem, and suggesting scores of courses which ran all the way from major operations to palliatives.

When it was all done and submitted, the store president said:

"That's all absolutely true . . . but these ideas are not new to us."

"But have you tried them?"

And the president shook his head.

In every company which has a sales problem . . . and almost every company has a sales problem . . . there is at least one person who knows what should be done.

In most cases, *many* people know what should be done.

The trouble is that no one *does* those things.

The difference between success

and failure often lies in merely doing the things which everyone knows should be done.

It is one of the functions of a modern advertising agency to discover those half-hidden truths which are the very foundation-stones of a company's future success . . . and to see that something be done about them.

It is another of the functions of an advertising agency to resist the impulse to drag in something whose only virtue is that it is new.

There have been cases where some new idea revolutionized a business over night. And those cases have been notable. But they are the exceptions rather than the rule.

And the reason is plain to see. For on the one hand, you are trying to graft new functions upon the business . . . and on the other, you are nurturing and developing and bringing out some angle of the company's sales or service which is a natural outgrowth of that business, and its methods of operations.

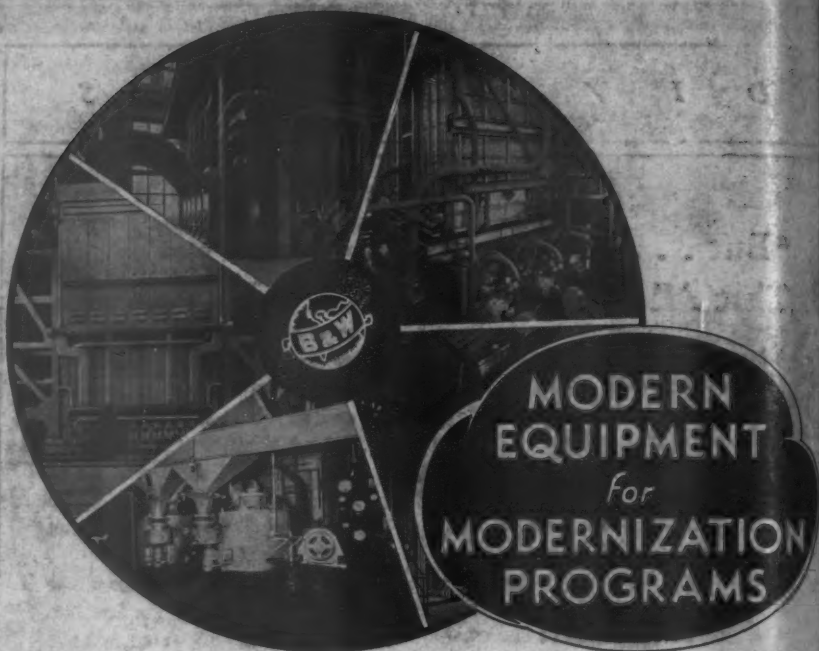
Don't discourage the new . . . or the impulse to do new things.

But don't under-estimate the importance of the old-but-untried.

KETCHUM, MACLEOD & GROVE, INC.

Koppers Building . . . Pittsburgh

ADVERTISING



Never before has The Babcock & Wilcox Company had such a wide range of equipment suitable for modernizing older power stations that are now obsolescent because of the great strides made during the past ten years in the economical generation of power.

Since 1929, the Company has developed, or announced as available: new types of boilers, a new water-cooled furnace construction, a pulverizer of 50-tons capacity, new types of fuel-burning equipment, and many improvements made in its other products.

The Babcock & Wilcox Company is fully prepared to help producers of power to carry out modernization programs involving changes, such as the installation of modern slag-tap furnaces with water-cooled floors, high-pressure boilers super-imposed on existing low-pressure systems, or high-pressure high-temperature units.

Babcock & Wilcox Engineers will be glad to discuss with executives and engineers the economic application of these new and improved products.

The Babcock & Wilcox Company . . . 85 Liberty Street . . . N. Y.

BABCOCK & WILCOX

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